An interventional study to assess the change in knowledge and attitude regarding child health care among adolescents of tribal ashram shala, Sakwar, Palghar district, by four-pronged approach

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Abstract

Background: Adolescents of tribal areas possess hardly any knowledge about the health care of the children. This study was undertaken to explore the attitudinal change among the tribal adolescents with respect to health care of the children by using the four-pronged approach.

Objective: To study the knowledge and attitude of adolescent school children about health care of children, study the change of knowledge and attitude, and identify the areas of child health care, which have a good retention among study subjects for 1 year.

Materials and Methods: A longitudinal interventional study was carried out in an ashram shala of tribal area, Sakwar, Palghar, Maharshtra, India. Baseline information about health care was collected using a structured questionnaire from 126 children. Health education sessions were conducted, and questionnaires were again given at 1, 6, and 12 months after the sessions to determine the retention of knowledge among the students.

Result: About 90.47% students before the interventions said that oral polio vaccine is the "only" vaccine given to children. The danger signs of ill-health being fever, cough, and diarrhea were known to only 22% students, while 1 year after the interventions, the same fact was perceived by more than 78% students.

Conclusion: The increase in retention of correct knowledge regarding various aspects of breastfeeding and weaning was significant. The four-pronged interventional model has brought about significant positive changes in the knowledge and attitude of adolescent boys and girls regarding the reproductive and child health issues, and these changes lasted till 1 year.

KEY WORDS: Adolescent, child health, ashram shala, model

Introduction

India has a high number of under-five child deaths including infant deaths. In our male-predominant society, child

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ill-health can be prevented to a large extent by the active participation of men. But, the issues of child health are never taught to the boys and fathers. Rather than altering the firmly established unhealthy reproductive practices, the healthy reproductive health practices can be established in the adolescent phase. The aim and objectives of the study were to study the change of knowledge and attitude after imparting health education by four-pronged approach regarding child health to adolescent boys and girls in tribal ashram shala, study the change of knowledge and attitude following specific interventions in areas of child health, and identify the areas of child health care, which have a good retention among study subjects for 1 year in developing a model among adolescent boys and girls. Hence, a combination of four feasible interventions

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was planned in this study—health education sessions in small groups, teachers training, parents meeting, and permanent display of posters to give knowledge to adolescents studying in the tribal ashram shala and see the impact by studying the proportion of knowledge change.

Materials and Methods

This was a longitudinal study with interventions. All the students (boys and girls) of classes eight and nine were selected by universal sampling method for the study purpose. A total of 130 students were present (73 boys and 57 girls). Of these 130 students, four students were not available for the subsequent data collection period. Hence, they were excluded from the study. Ethical clearance was obtained from the Institutional Review Board of the College after submitting the protocol and subsequently answering all their queries. Permission was obtained from the Principal of the ashram shala for conducting the study after giving a detailed explanation of all the procedures. A written informed consent was taken from the parents of the students, while the assent was taken from the students. The total study period was two-and-a-half years (from July 2011 to December 2013). The actual data collection was during the period from September 2012 to 2013. Four-pronged approach was used to identify the stakeholders to bring about sustained knowledge and attitudinal change to create a holistic integrated strategy for the promotion of positive maternal health care. The four prongs were for:

1. Adolescent boys and girls

- · Health education sessions were conducted in small groups of 30 each and taken separately for boys and girls within a time period of 2 weeks.
- Interaction with the medical officer of the primary health center (PHC).

2. Teachers

 Two training sessions were conducted lasting for two 2 h each regarding reproductive and child health (RCH) education, which was followed by a questionanswer session according to the convenience of the teachers.

3. Parents

· Two meetings with parents were held for the discussion of the components of RCH and its importance in the meeting, which was followed by a question-answer session.

4. Display of Health Posters

- Permanent posters in the school at strategic points after explaining the contents of each of them to the students in detail, which acted as a reminder for these students. A total of four posters were used during the health education sessions for information and reinforcement of knowledge:
- breastfeeding and weaning;
- vaccines to the child;
- danger signs of ill-health of newborns and children; and
- oral rehydration solution.

Focus Group Discussion

Two focus group discussions (FGDs) were conducted 1 year after the interventions—one with the teachers and the other with parents. The total number of participants in the FGD with the teachers was nine members, while that with parents was 11 members.

Information was collected from the adolescent boys and girls through the validated semi-structured questionnaire on these following occasions:

- 1. before the health education sessions;
- 2. 1 month after the health education sessions:
- 3. 6 months after the health education sessions; and
- 4. finally, at 1 year after the health education sessions.

Statistical Analysis

All the responses were tabulated by the investigator using Microsoft Excel. Graphical representations were made wherever necessary. Data were analyzed by using SPSS software, version 16.0. Statistical tools used were proportions and percentages and McNemar test.

Result

Of the total 70 boys, 38 (54.29%) boys were in standard eight and 32 (45.71%) boys in standard nine. Similarly, 36 (64.29%) girls were in standard eight and 20 (35.71%) girls in standard nine accounting to the total of 56 girls [Table 1].

About 83.33% of students were aware regarding the necessity of checkup of mother and child after delivery, while only 60 students knew that mother's milk was to be given to the newborn within 1 h. Seventy-four students were aware that age up to which only breastfeeding is given to the baby is 6 months of age. The fact that the duration of breastfeeding to baby is up to 2 years of age was known to just 16.66% students. Forty-three students perceived that the age at which semisolids should be introduced to the baby was at 6 months of age. The number of students who retained the respective facts at the end of 1 year was significantly higher as evident from Table 2.

Before interventions, the importance of checkup of mother and child such as the early detection of health problems of mother, checking the growth of the baby, and getting medicines was acknowledged by 30, 61, and 20 students, respectively. These numbers increased to more than 80 students for all these facts at the end of 1 year. Before interventions, the awareness on the importance of breastfeeding for the nutrition of the baby, its physical and mental developments, and its good health was found among 16.66%, 56.34%, and 21.42% of students, respectively. These percentages increased to

Table 1: Sex-wise classification of the respondents

| Class | Boys, <i>N</i> (%) | Girls, <i>N</i> (%) | Total, N (%) |
|--------|--------------------|---------------------|--------------|
| Eighth | 38 (54.29) | 36 (64.29) | 74 (58.73) |
| Ninth | 32 (45.71) | 20 (35.71) | 52 (41.27) |
| Total | 70 (100) | 56 (100) | 126 (100) |

Table 2: Postnatal care

| | Before interventions, N (%) | After 1 month, N(%) | After 6 months, N(%) | After 1 year, N(%) | McNemar value |
|--|-----------------------------|---------------------|----------------------------|--------------------------|-----------------|
| Necessity of checkup of mother and child after delivery (yes) | 105 (83.33) | 126 (100) | 124 (98.41) | 120 (95.24) | 0.027, df = 1 |
| Food items given to the newborn after birth (mother's milk) | 60 (47.61) | 126 (100) | 126 (100) | 124 (98.41) | 0.000, $df = 1$ |
| Ideal time to start breastfeeding (within 1 h) | 60 (47.61) | 126 (100) | 125 (99.21) | 120 (95.24) | 0.000, df = 1 |
| Age up to which only breastfeeding to the baby (6 months of age) | 74 (58.73) | 124 (98.41) | 118 (93.66) | 113 (89.68) | 0.000, $df = 1$ |
| Duration of breastfeeding to baby (2 years of age) | 21 (16.66) | 96 (76.19) | 88 (69.84) | 64 (50.79) | 0.000, df = 1 |
| Age at which semisolids should be introduced to the baby (6 months of age) | 43 (34.12) | 118 (93.66) | 110 (87.30) | 107 (84.92) | 0.000, $df = 1$ |

Table 3: Postnatal care

| | Before interventions, N (%) | After 1 year, N (%) |
|---|-----------------------------|---------------------|
| What is the importance of checkups of mother and child? | | |
| Early detection of health problems of mother | 35 (33.33) | 92 (76.66%) |
| To check the growth of the baby | 61 (58.10) | 101 (84.16) |
| To get medicines | 20 (19.05) | 82 (68.33) |
| What are the benefits of breastfeeding? | | |
| Nutrition of the baby | 21 (16.66) | 90 (71.42) |
| Physical and mental developments of the baby | 71 (56.34) | 106 (84.12) |
| Vaccines that a child should receive | | |
| Only OPV | 114 (90.47) | 2 (1.59) |
| OPV + DPT + BCG + measles (any 3 of 4) | 0 (0) | 124 (98.41) |

more than 69% of students for all these facts at the end of 1 year. The majority of the students [114 (90.47%)] before the interventions said that oral polio vaccine (OPV) is the "only" vaccine given to children. A year after the interventions, 124 (98.41%) students opined about three or more of the vaccine doses (BCG, OPV, DPT, hepatitis B, and measles) given to a child [Table 3].

Before interventions, 42, 52, and 28 students were aware that fever, diarrhea, and cough, respectively, formed the danger signals of ill-health in a child. The number of students correctly identifying these facts was high (more than 98 students) after 1 year of the study. About 66.96% students perceived the importance of regular checkup of a child as its health checkup and 62.50% students as to get medications. After 1 year, these percentages increased to 76.52% and 66.08%, respectively [Table 4].

The FGD with the teachers conducted 1 year after the interventions revealed that maximum number of students discussed the issues of vaccines to the child and danger signs of ill-health of newborns and children with them. The FGD with the parents conducted 1 year after the interventions showed that the most commonly discussed issues by the students with their parents were breastfeeding and weaning and the

importance of postnatal checkup. The most commonly discussed poster by the students with the teachers was vaccines to the child. The numbers of students who could correctly answer the contents of the poster breastfeeding and weaning, vaccines to the child, danger signs of ill-health of newborns and children, and oral rehydration solution 1 year after the interventions were found to be 107, 104, 103, and 92, respectively [Table 5].

Discussion

Ashram shala is a residential school where the students reside in the premises and education is imparted to them. Only imparting health education by dialectic method to these students does bring about health awareness and change in knowledge of the students, but long-term retention of this knowledge is doubtful. Hence, a novel approach was done in this study by involving the teachers and parents of the students and displaying permanent posters on the issues of child health after explaining them in detail to the students.

The reason for involving the teachers was that, as they also reside in the campus of the school, they are available for

Table 4: Child care

| | Before interventions N (%) | After 1 year, N (%) |
|--|----------------------------|---------------------|
| What are the danger signals in a child? | | |
| Fever | 42 (33.33) | 100 (79.36) |
| Diarrhea | 52 (41.26) | 111 (88.09) |
| Cough | 28 (22.22) | 99 (78.57) |
| What is the importance of regular checkup of | of a child? | |
| Health checkup of the child $(n = 112)$ | 75 (66.96) | 88 (76.52) |
| To get medications ($n = 115$) | 70 (62.50) | 76 (66.08) |

Table 5: Posters

| S. no. | Posters | After 1 year, N (%) |
|--------|---|---------------------|
| 1. | Breastfeeding and weaning | 107 (84.92) |
| 2. | Vaccines to the child | 104 (82.53) |
| 3. | Danger signs of ill-health of newborns and children | 103 (81.74) |
| 4. | Oral rehydration solution | 92 (73.01) |

clearing any doubts in the minds of the students. Thus, the students approach the teachers who are available round the clock for the students. The teachers of the school are thus the first point of contact for these students.

The students usually go to their homes in vacations and spend a few months with their parents. Thus, imparting correct knowledge to the parents is also very essential, as parents are the point of contact for these students during vacations.

Posters were available for the students permanently, which serve the purpose of continuously reminding these students about the various issues related to child health.

Table 1 shows that there are, in total, 126 students from standard eight and nine comprising 70 boys and 56 girls. Of them, 74 students (38 boys and 36 girls) were from standard eight and 52 students from standard nine (32 boys and 20 girls).

Table 2 shows that 105 (83.33%) students before the interventions were of the opinion that checkup of mother and child after the delivery is important and necessary. Care of the mother and the newborn after delivery is called postnatal care (PNC). This is done to prevent complications and provide care for rapid restoration of mother to optimum health. It is evident that the remaining students did not believe that checkup of mother and child after the delivery is necessary. This shows the necessity of imparting knowledge about the importance of postnatal checkups in the students. One month after the interventions, 126 (100%) students shared this opinion, which declined to 124 (98.41%) students 6 months and 120 (95.24%) students 1 year later after the interventions.

Table 2 shows that, before interventions, 60 (47.61%) students were of the opinion that, immediately after birth, baby has to be fed with mother's milk.

Mother's milk is the best food for the baby, which can be digested easily and has no side effects. But, in our study, it was found that the remaining 66 students were not aware of this fact and preferred to give other foods to the newborn

baby. Other foods are not digested by the delicate gastrointestinal system of the baby and leads to diarrhea. Moreover, the first milk (colostrum) may be denied to the baby, while giving the baby this other food. Hence, these students need to be made aware of the importance of giving mother's milk to the baby and nothing else.

A month after the interventions, 126 (100%) students opined that mother's milk is to be given to the baby immediately after birth, which remained the same after 6 months of the interventions but decreased to 124 (98.41%) students 1 year after the interventions. Thus, a good retention of knowledge among the students was observed after 1 year of interventions, which could be ascertained to the four-pronged interventional model.

Table 2 shows that 60 (47.61%) students before the interventions were of the opinion that breastfeeding should be started within 1 h of the baby's birth, while the remaining 66 students were unaware regarding the exact time of initiation of breastfeeding.

Breastfeeding should be started within 1 h of the birth of the baby. Breast milk is the ideal food for the baby, especially the first milk (colostrum) is the most suitable food, as it contains high protein and other nutrients. This important issue being known to only 60 respondents could deprive the baby from colostrum, which is very essential for the health and well-being of the baby.

A month after the interventions, 126 (100%) students were of the opinion that breastfeeding should be started within 1 h of the baby's birth, but this declined to 125 (99.21%) students 6 months after the interventions and 120 (95.24%) students 1 year after the interventions. From these observations, it is clear that the maximum students could retain the correct knowledge even after 1 year of the interventions.

In the study done by Mukhopadhyay and Paul,[1] 15 (12.4%) people knew about the early initiation of breastfeeding.

Table 2 shows that 74 (58.73%) students before the interventions were of the opinion that only breastfeeding should be given to the baby up to 6 months of age.

Exclusive breastfeeding is given till 6 months as nutritional demands of the baby are catered by breast milk alone. Moreover, the gastrointestinal system of the baby is delicate and cannot digest any other food other than breast milk. So, any other food other than mother's milk may disrupt their gastrointestinal system and can lead to morbidity and ill-health in the infants. Breast milk satisfies both thirst and hunger of the baby and helps in its physical and mental developments up to 6 months of age.

A month after the interventions, this opinion was shared by 124 (98.41%) students. This figure gradually declined to 118 (93.66%) students 6 months after the interventions and to 113 (89.68%) students 1 year after the interventions. Thus, a good retention of knowledge among the students was observed after 1 year of interventions, which could be ascertained to the four-pronged interventional model.

Table 2 shows that "just" 21 (16.66%) students before the interventions opined that breastfeeding should be done up to 2 years of age. Thus, it is evident that very few students were aware of the fact that a baby should ideally be breastfed up to 2 years of age. One reason is that a child is generally stopped from breastfeeding when it starts to eat all the foods cooked at home

A month after the interventions, 96 (76.19%) students said that the duration of breastfeeding should be 2 years, but this figure decreased to 88 (69.84%) students 6 months after the interventions and 64 (50.79%) students 1 year after the interventions. Thus, from these figures, it is clear that the change in knowledge in the respondents was less, and the number of students who believed that breastfeeding should be continued up to 2 years of age decreased considerably along with the passage of time. Thus, this is an important issue that should be focused more upon.

Table 2 shows that 43 (34.12%) students before the interventions said that supplementary food should be added to the diet of the baby at the age of 6 months. Weaning is a gradual process of supplementing breast milk by home-cooked mashed food rich in proteins and other nutrients, which is done at the age of 6 months as mother's milk alone is not sufficient to sustain the growth of the baby beyond 6 months. Weaning is a very crucial period of life, because, if not done properly, it may lead to diarrhea and protein-energy malnutrition (PEM), thus resulting in growth failure. In our study, the majority of the students [83 (65.88%)] did not know the correct age of weaning. Some opined to add supplementary food to the baby's diet early (1 month), while others preferred a late addition of supplementary diet (9 months to 1 year). Thus, it is essential to impart correct knowledge of this important fact to these students.

That supplementary food should be added at the age of 6 months was opined by 118 (93.66%) students 1 month after the interventions. Six months after the interventions, 110 (87.30%) of 126 students shared the same opinion, while

this figure declined to 107 (84.92%) students 1 year after the interventions. From these observations, it is clear that the maximum students could retain the correct knowledge even after 1 year of the interventions.

In the study done by Seema and Kalpna,^[2] 67% of the girls knew about the supplementary food to be given to the child at the age of 4 months. This difference could be owing to the higher age group of the girls included in this study (13–21 years).

Table 3 shows that, before the interventions, 35 (33.33%) students had given the opinion that checkups of the mother and child after delivery should be done for an early detection of maternal postnatal complications, for monitoring the growth of the baby [61 (58.10%) students], or to get medicines [20 (19.05%) students].

Health checkups of the mother and the baby after delivery are done to prevent complications of postpartum period and provide care for a rapid restoration of mother to optimum health and to check adequacy of breastfeeding. The complications that occur to the mother in the postnatal period are infections of the genital tract (fever and foul smelling lochia), thrombophlebitis, and hemorrhage. At least three to six postnatal checkups must be done to assess the involution of uterus and check for the above-mentioned complications and treat them if present. Hemoglobin estimation is done, and the corrective measures are implemented. Nutritional advice is given to the malnourished mother. Growth monitoring of the baby and checking the adequacy of breastfeeding are other major areas of postnatal checkups.

A year after the interventions, 92 (76.66%) students said that PNC checkups should be done for an early detection of maternal postnatal complications, 101 (84.16%) students perceived that PNC checkups are important for monitoring the growth of the baby, and 82 (68.33%) students believed that to get medicines is the importance of PNC checkups. The sustainability of knowledge was found to be declining when compared with 1 and 6 months, and, hence, this area of health awareness should be targeted more.

Table 3 shows that the benefits of breastfeeding as perceived by the students before the interventions were that 21 (16.66%) students said that it is essential as the nutrition of the baby, that it was needed for the physical and mental developments of the baby [71 (56.34%) students], or that they do not fall ill [27 (21.42%) students].

Breastfeeding possesses advantages such as protection of the baby from malnutrition and infections and meeting the nutritional requirements of the baby. It is safe, clean, hygienic, and available to infant at correct temperature. It is easily digested and utilized by the baby. It promotes the bonding between the mother and the infant. Sucking helps in the development of jaw and teeth of the baby. It prevents neonatal hypocalcemia and contains antimicrobial factors that prevent infections. Special fatty acids in the breast milk lead to increased intelligence quotient and better visual acuity. Thus, it helps in the physical and mental developments of the baby, and the baby remains healthy. Thirty-two (25.40%) students

were unaware about the benefits of breastfeeding and, hence, may not think breastfeeding of the infants as essential for their well-being.

A year after the interventions, 90 (71.42%) students perceived that it is essential as the nutrition of the baby, 106 (84.12%) students believed that it is required for the physical development of the baby, and 88 (69.84%) students opined that it is needed for the mental development of the baby. The sustainability of knowledge was found to be declining, and, hence, this area of health awareness should be targeted more. In the study done by Seema and Kalpna, [2] 48% were aware of the importance of breastfeeding the child.

Table 3 shows that the majority of the students [114 (90.47%)] before the interventions said that OPV is the only vaccine given to children. Vaccines are the specific preventive measures against the diseases, which boost the immunity against specific antigens and should always be given to the children.

That only OPV is the vaccine given to the newborns could be because generally adolescents witness pulse polio immunizations and administration of oral polio drops to the infants by health-care workers at homes or at anganwadis. Hence, this knowledge is impregnated over their minds without sufficient exposure to the fact that other vaccines are also given to the children. Universal Immunization Program (UIP) is undertaken by the government, since 1985 to protect the children against six diseases—tuberculosis, polio, diphtheria, pertussis, tetanus, and measles.

That any three of the four vaccines (i.e., BCG, OPV, DPT, and measles) are given to a child was mentioned by 124 (98.41%) students 1 year after the interventions. The reason for this retention in knowledge could be because the posters on vaccination were available in the school permanently and served the purpose of continuously reminding the students about all the vaccines that a child receives. Moreover, the students interacted with their teachers and put up queries, which were solved, and, thus, helped the students to present the correct knowledge about vaccinations to child.

In the study done on adolescents in 22 states by Gupta et al., [3] awareness of at least one method of immunization was present in three-fifth (60.1%) of the students. The awareness was the least for DPT (13.5%) and the most (55%) for polio only. The difference may be because this study is multicenteric and the study subjects were younger in age. In our study, we found that children mostly knew only about polio vaccination (90.5%) (i.e., 94.64% girls and 87.14% boys). In the study by Seema and Kalpna, [2] 75% respondents were aware of polio vaccine.

Table 4 shows that, of the 112 students who perceived that regular checkup is necessary for a child, 75 (66.96%) students opined that it is necessary for the health checkup of the child, while 70 (62.50%) students said that it is needed to get medicines. Moreover, before the interventions, the danger signs of ill-health as perceived by the students were—fever [42 (33.33%)] students, diarrhea [52 (41.26%)] students, and cough [28 (22.22%)] students.

These danger signs are very important, because they are suggestive of an underlying infection in the child and may

warrant referral of the child to a health-care facility for urgent treatment. Not identifying these danger signs early may land the child in complications with dire consequences. Government of India has started IMNCI to combat these danger signs and rapid restoration of the child to normalcy. Here, an integrated management of the child with multiple interventions through one delivery channel is undertaken. Untied funds are provided to PHCs to be used by the medical officer and the auxiliary nurse midwife for purchasing of emergency drugs as required and arranging transportation facility for the child to the health-care facility. Moreover, school health services have been started, wherein the students are periodically examined by the health-care personnel and given medications and if required can be referred to a health-care facility. Anganwadis are another place of contact where the child is periodically examined by the medical officer and managed accordingly.

A year after the interventions, 100 (79.36%) students felt that fever is a danger sign, 111 (88.09%) students opined that diarrhea is a danger sign, while 99 (78.57%) students perceived that cough could be a danger sign of ill-health. The sustainability of knowledge was found to be declining, and, hence, this area of health awareness should be targeted more.

In regular health checkup, the weight of the child is periodically marked on the growth chart, which serves as a diagnostic tool for identifying high-risk children. They also act as a tool for the evaluation of the corrective measures applied to restore the health of the baby and educational tool to teach the mother in care of her child. Moreover, the health problems of the child are diagnosed and managed accordingly by giving appropriate medications. One year after the interventions, 88 (76.52%) students opined that it is necessary for the health checkup of the child, while 76 (66.08%) students said that it is needed to get medicines. The sustainability of knowledge was found to be declining, and, hence, this area of health awareness should be targeted more.

Recommendations

- 1. The four-pronged approach demonstrates desirable knowledge and attitudinal change among the adolescents. No external financial or manpower resources are required as the health education sessions, teacher's training, and parents' meeting can be arranged in the school. Moreover, the teachers and parents can solve the queries of the students and are available to the students all throughout the year. Thus, this package should be promoted in all the residential schools.
- Sustainability of the correct knowledge and attitudes in the adolescent students by the four-pronged interventional approach may be significantly higher when compared with only imparting health education. Hence, this four-pronged approach should be mainstreamed in all the residential schools.
- 3. The retention of the knowledge in the students even after 1 year of the interventions is suggestive that there is a likely

chance of applying these correct attitudes in their own lives when they become adults and will bring about the desired behavioral change in themselves.

- 4. The knowledge gained did not sustain to a good extent for 1 year in the following areas:
 - importance of checkups of mother and child;
 - duration of breastfeeding to baby; and
 - importance of regular checkup of a child.

These issues need to be stressed upon more in an intensified, simplified manner with additional communication strategies so that students possess a wholesome knowledge about these issues.

- 5. Visits to the nearest PHC should be arranged on a regular basis for the students, so that they can see for themselves and learn about the various issues pertaining to child health that are managed by the PHC.
- 6. Schools should arrange health activities for the students along with their periodic evaluation and continued refreshing on regular days observed by them.
- 7. Posters should be permanently displayed at strategic points in the villages. Street plays periodically and health education sessions on the market days can be conducted periodically so as to raise the awareness among the local population.
- 8. Collateral schemes, on the grounds of Gram Swachhata Abhiyan, need to be started. The villages can be graded and prizes given to those with:
 - 100% regular checkups of mother and child;
 - 100% timely and correct vaccination;
 - zero severe acute malnutrition/moderate acute malnutrition cases in the villages, etc.
- The mass media should telecast informative and interesting medical programs on this vital issue. Television is widely accessible and can reach even highly remote groups and convey messages even to illiterate masses.

Conclusion

It is concluded that the four-pronged interventional model comprising health education sessions to the adolescent students, teacher's training, parents' education, and permanent display of posters is very useful in creating and sustaining health awareness among the adolescent students. Attitudinal change regarding the various aspects of RCH is seen. The retention of knowledge is good even after 1 year of the interventions. This approach of four-pronged interventional model can bring about the desired change in the behavior of the adolescents regarding various RCH issues when they reach adulthood. It is cost-effective, as all the areas from where the students can get knowledge are understood. No additional manpower is needed. No additional cost is incurred. It can be a good method of putting inputs into the schools/residential schools and the institutions where adolescent boys and girls are taking education. The topics covered can be those where behavioral change is desired.

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