Methodology

The methodology is the overall operational framework of the research that stipulates what information to be collected, from which sources and the procedures to achieve the research objectives (Green et. al. 2008). This chapter describes the research methodology adopted to achieve the objectives of the present study titled “Impact of Reproductive Health Education Programme (RHEP) among adolescent girls – an intervention study” which is presented under the following heads.

A. Population and Sampling

B. Construction of Tools

C. Conduct of the study

D. Analysis of data.

A. POPULATION AND SAMPLING

Sampling is the process of selecting units (e.g. people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen (Trochim, 2006). The sampling process was carried out in the given below phases where simple random sampling technique takes place in every sub-stages of the sampling procedure:

a. Phase – I – Selection of Locale

b. Phase – II – Selection of Schools

c. Phase – III – Selection of Sample

a. Phase – I – Selection of Locale:

Coimbatore city is the second largest city in Tamil Nadu state and fastest growing urban agglomeration with educational, industrial and commercial hub. It is also a place where it’s occupants still preserve and conserve traditional and cultural norms in its family system and society. Due to this unique nature of this
city, the curious adolescents are exposed to various sexual and reproductive health issues through urban culture, at the same time they are restricted to obtain accurate information openly due to the conservative society. In view of the above facts, Coimbatore was identified as the locale for present study.

b. Phase – II – Selection of Schools:

Tamil Nadu is one of the most literate states in India. According to 2011 Census, Literacy rate in Tamil Nadu is 80.09 percent which is above the national average where Coimbatore stands at 85 – 90 percent. Educational institute serve excellent vehicle for reaching young people and are among the most capable of widespread implementation of any programme (Corby, 1994). It is especially true since Tamil Nadu stands among the top states with 100 percent gross enrolment and more than 99 percent of net enrolment ratio in every district. Where net enrolment ratio of Coimbatore children were reported as more than 99 percent in primary and upper primary with 1 to 1.55 percent of dropout rate which majority of these children continue their education in secondary and higher secondary level (www.ssa.tn.nic.in). Moreover many of the earliest to the newest researchers and experts suggested the school being the most comfortable place to impart sexual and reproductive health education.

Therefore Investigator felt school being the most appropriate place to conduct the present study. The present study set few inclusion criteria for identifying and selecting the schools in order to ensure the homogeneity among the study population. Those were:

Location of the schools:

In order to have equal geographical representation, it was ensured to identify the schools within the radius of 25 kilometers from the heart of the Coimbatore which is stretch in all the four direction.

School Type:

Schools can be categorized into many types with different variables. However considering the nature of the sample i.e. adolescents age ranges from 13 - 17 years, one of the important criteria were that school should offer both secondary and higher secondary level of education.
**Methodology**

*Syllabi offered:*

One of the inclusive criteria set for school selection is that schools which offer similar syllabus pattern. Different schools in Coimbatore follow various syllabus under different boards such as Central Board of Secondary Education, C.B.S.E; Council for Indian School Certificate Examination, I.C.S.E, and The Tamil Nadu State Board of School Examination. The private and public schools in Coimbatore follow either one or two of the stated syllabi or all with different sets of students. However, the government schools of Tamil Nadu including schools in Coimbatore follow only Tamil Nadu State Board syllabi which are also referred as Samacheer Kalvi. Therefore, for the present study, Schools which follow Tamil Nadu State Board syllabi were selected since it is more commonly offered regardless of the nature of administration or the students.

*Medium of Instruction:*

Tamil and English are the common medium of teaching and learning in the schools of Tamil Nadu. Schools with English as the only medium of teaching and learning were considered for the study since conduct of the study for survey and education were prepared and developed in English.

After taking account of all these inclusion criteria, 24 schools from Coimbatore were initially shortlisted from the four zones – 6 schools in each zone. Out of these 24 schools, 12 schools were drawn randomly 3 schools from each zone. For the smooth conduct of the study, the researcher sought voluntary participation, cooperation and commitment from school management. As a result in the next stage of school selection, 2 schools one from north zone and another located in the west zone extended their willingness to be part of the study. Therefore these 2 schools were identified for the present study.

**c. Phase – III – Selection of Sample:**

A single member of a population is referred to as an element. When some of the elements are selected with the intention of finding out something about the population from which they are taken, that group of elements is referred as a sample and the process of selecting called sampling (Saravanavel, 2006).
Adolescent girls age ranges from 13 - 17 years were identified as sample of the study. A sample is a group, where, respondents possess specific attributes that the researcher is interested in studying. And the investigator felt these adolescents have that specific attributes for the present study. In fact many researchers in the field of reproductive health emphasized adolescence laid the foundation for the whole reproductive health of an individual. For instance, early adolescence which extends roughly form 13 to 17 years (Hurlock, 1980) is the time where pubertal changes, sexual maturation, sexuality and sexual exploration occur. It is considered a significant stage for learning and adapting to these new changes where providing knowledge to establish healthy attitude and practices is crucial. Also late adolescents who are in the threshold of adulthood are already on the way to ascertain a lifestyle with certain beliefs, values and attitude which is difficult to change once it is established. Therefore, researcher believed adolescents in the age range of 13 – 17 years were apt for the present study to assess the knowledge, attitude and practices on their reproductive health and impart education on the same.

The study focuses on adolescent girls of 8th, 9th and 11th standard students since the students of 10th and 12th standard were omitted from the study citing the reasons that these groups of students were to appear board examination and could not be able to participate in the study. Consequently, every girl in the age range of 13 – 17 years old in 8th, 9th and 11th standard from both schools (n1 = 406, n2 = 413; total n = 819) were shortlisted for the study. Out of total 819 respondents, only 782 respondents were consented voluntary participation of the study. Therefore 782 respondents were finalized as the sample of the study for preliminary survey. This study sample was further divided into Experimental group which comprised of 389 adolescent girls and control group of 393 adolescent girls who were selected at random.

B. CONSTRUCTION OF TOOLS

During research process any instrument used to collect data consistent with the objectives of the study is known as tool. The researcher can either use the available tools or construct new tools. For the present study, investigator
decided to develop the appropriate tools. After accumulating relevant literature pertaining to the study including a range of available related textbooks, articles, modules and discussion with few adolescent girls, a set of tools were constructed to secure adequate information from the study sample. They are:

i. Questionnaire to elicit background information

ii. Questionnaire to assess adolescent’s sources of information on reproductive health

iii. Adolescent Reproductive health KAP scale

i. Questionnaire to elicit background information:

According to Kothari (2009), questionnaire consists of a number of questions printed or typed in a definite order on a form or set of forms. The investigator developed a questionnaire to collect information on socio-economic status of the respondents with relevance to personal, their parents and family background. (Appendix - I)

ii. Questionnaire to assess adolescent’s sources of information on reproductive health:

A questionnaire to assess adolescent’s sources of information on reproductive health was developed. (Appendix - II)

iii. Adolescent Reproductive Health KAP scale:

A scale to assess the level of Knowledge (K), Attitude (A), and Practice (P) on various aspects of reproductive health of adolescents was developed. (Appendix - III)

The scale was structured into 3 different sets to assess the level of Knowledge, Attitude and Practices where each set was carefully formulated to measures 4 major domains of adolescents’ reproductive health issues namely,

a) Pubertal changes and menstruation,

b) Sexual behavior of adolescents,

c) Early marriage and adolescent pregnancy

d) HIV/AIDS.
Methodology

Set 1. Scale to assess Knowledge:

The scale to assess adolescent’s reproductive health Knowledge had a total of 68 statements which is distributed equally (17 statements each) among the 4 major domains. The modes of responses of most statements were in the form of either ‘yes’ or ‘no’ indicating the complete agreement or disagreement to the proposed statement. Though, a ‘don’t know’ option was included besides yes/no since it is likely to reduce noise in the data in cases if respondent is unaware of the correct response. However the responses of the items no. 12 to 17, 50 and 51 were provided in the form of multiple choice responses due to the nature of statement.

The score of each item were either 1 or 0 according to the nature of the statement, i.e., if the response is ‘yes’ for a positive statement then the score is ‘1’ and if the response is ‘no’ for positive statement then the score is ‘0’. Likewise for negative statement the score is ‘1’ for ‘no’ response and ‘0’ for ‘yes’ response. However the ‘don’t know’ response option carry only ‘0’ score since it is the indication of lack of knowledge. Similarly for the items 12 to 17, 50 and 51, score was ‘1’ for correct answer and ‘0’ for wrong answer. The scale provides the total knowledge score for all four major domains where the respondents can be categorized into 3 levels namely low, moderate and high according to their knowledge scored. The score ranges of the classification are as follows (table I).

<table>
<thead>
<tr>
<th>S.No</th>
<th>Domains</th>
<th>Levels of Knowledge (Score range)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>Pubertal changes and menstruation</td>
<td>0 - 5</td>
</tr>
<tr>
<td>2</td>
<td>Sexual behavior of adolescents</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Early marriage and adolescent pregnancy</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>HIV/AIDS</td>
<td></td>
</tr>
</tbody>
</table>

TABLE I
Grading the Knowledge level
Set 2. Scale to assess Attitude:

A 5 - point, 3 - directional Likert scale of total 66 items was developed to determine the attitude on Reproductive health among the selected respondents. The scale constitutes both positive and negative statements to reflect un-bias response towards the issues. Out of these 66 items first 18 items were about pubertal changes and menstruation, 16 items were about sexual behavior and 15 were about early marriage and adolescent pregnancy and remaining 17 were about HIV/AIDS. Each statement carries 1 to 5 score indicating lowest to highest degree of favorable attitude towards the reproductive health issues. An overall score as well as total score of each domain were obtained from summing up the scores of statements. The below table (table II) provide the details of the classification of attitude on reproductive health.

**TABLE II**

Grading the Attitude level

<table>
<thead>
<tr>
<th>S.No</th>
<th>Domains</th>
<th>Levels of Attitude (Score range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pubertal changes and menstruation</td>
<td>18 – 42</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43 – 66</td>
</tr>
<tr>
<td></td>
<td></td>
<td>67 – 90</td>
</tr>
<tr>
<td>2</td>
<td>Sexual behavior of adolescents</td>
<td>16 – 37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38 – 59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60 – 80</td>
</tr>
<tr>
<td>3</td>
<td>Early marriage and adolescent pregnancy</td>
<td>15 – 35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36 – 55</td>
</tr>
<tr>
<td></td>
<td></td>
<td>56 – 75</td>
</tr>
<tr>
<td>4</td>
<td>HIV/AIDS</td>
<td>17 – 40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>41 – 62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>63 – 85</td>
</tr>
</tbody>
</table>

Set 3. Scale to assess Practice:

The scale to assess adolescent’s reproductive health Practice had a total of 58 items. These 58 items were divided into 4 dimensions - pubertal changes and menstruation (19 items), sexual behavior (14 items), early marriage and adolescent pregnancy (11 items) and remaining HIV/AIDS (13 items). The modes of responses of most statements were in the form of ‘never / sometimes / often / always’ indicating the frequency of practice to the proposed statement. However the responses of the items no. 14 to 19, 43 and 44 were provided in the form of multiple choice responses due to the nature of statement.
Methodology

The score of each statement carry 1 to 4 marks indicating lowest to highest degree of favorable practice towards the reproductive health care. The variations in the score was decided according to the nature of the statement i.e., when the statement is positive, the score is 1, 2, 3 and 4. When the statement is negative, the score is vice versa i.e., 4, 3, 2 and 1. Similarly, for the items 14 to 19, 43 and 44, scores were given as ‘1 mark’ for poor practices and moving upwards at ‘4’ for good practices. By summing up the scores the total practice score for all four major domains as well as overall score can be obtained. These scores were further categorized into 3 levels namely low, moderate and high so that the respondents can be easily classified according to their scores. The score range of these classification were given in the below table III.

**TABLE III**

**Grading the Practice level**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Domains</th>
<th>Levels of Practice (Score range)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>Pubertal changes and menstruation</td>
<td>19 – 38</td>
</tr>
<tr>
<td>2</td>
<td>Sexual conduct and behaviour</td>
<td>14 – 28</td>
</tr>
<tr>
<td>3</td>
<td>Early marriage and adolescent pregnancy</td>
<td>11 – 22</td>
</tr>
<tr>
<td>4</td>
<td>HIV/AIDS</td>
<td>13 – 26</td>
</tr>
</tbody>
</table>

**Validation of the Tools**

The developed tools of the present study were scrutinized, evolved and pre-tested carefully to ascertain its validation.

The scale was developed in such a way to reflect the objectives of the present study. The tool was designed as an easily understandable structure including instructions at the necessary places. The statements were framed in simple phrases. All the statements were checked to make sure that they have a logical link with the objectives of the study. The statements covered to the full range regarding the issues of adolescent’s reproductive health viz. pubertal changes and menstruation, sexual behaviour and conduct, early marriage and adolescent pregnancy and HIV/AIDS.
Methodology

The developed tools were subjected to the experts in the related fields for scrutiny; constructive suggestions were incorporated and modified accordingly before finalizing.

Pilot Study

The developed tools were pre-tested among 45 adolescent girls of 13 to 17 years old. It was done in order to gain an understanding whether the respondents were able to comprehend and easily understand the statements, instructions provided and pattern of the scale. Statements which were found to be difficult to understand were rephrased and the items which were found to be too sensitive were also omitted in view of the conservative societal norms. Thus the final version of the tool was evolved.

Reliability

To check the reliability of the data as item wise and total score, the data of the 10% of the total study population is taken then pre and post test is carried out. The Cronbach's alpha is calculated to test reliability between Pre-test and Post-test. It was found that the reliability is high as item wise and total as well. Here, the Cronbach’s alpha value ranges from 0.93 to 1 indicates more reliable, which the details are presented in the below table IV.

<table>
<thead>
<tr>
<th>Domains</th>
<th>Knowledge</th>
<th>Attitude</th>
<th>Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pubertal changes and menstruation</td>
<td>.993</td>
<td>.998</td>
<td>.996</td>
</tr>
<tr>
<td>Sexual conduct and behaviour</td>
<td>1</td>
<td>1</td>
<td>.998</td>
</tr>
<tr>
<td>Early marriage and adolescent pregnancy</td>
<td>.976</td>
<td>1</td>
<td>.991</td>
</tr>
<tr>
<td>HIV / AIDS</td>
<td>.998</td>
<td>1</td>
<td>.998</td>
</tr>
<tr>
<td>Total</td>
<td>.994</td>
<td>.999</td>
<td>.998</td>
</tr>
</tbody>
</table>

Table IV

Cronbach’s Alpha Value of Adolescent reproductive health KAP scale
C. CONDUCT OF THE STUDY

The conduct of the present study was carried out in the following phases.

Phase I - Rapport building
Phase II - Preliminary data collection
Phase III - Development of module
Phase IV - Imparting Reproductive Health Education Programme
Phase V - Evaluation of the education programme

Phase I- Rapport building

Rapport building was an important endeavor of the present study since it is seen as a degree of acceptance and cooperation on the part of the participant to a research project (Blohm, 2007). Therefore, efforts were made to establish a good rapport with the administrators and educators of the participant schools as well as participant themselves. Investigator approached the heads of participant schools. She oriented about the study in brief, significance of the study and details regarding its conduct. At first, the head masters were hesitant to approve to conduct the study as it dealt with sensitive issues as they felt it might evoke the students to explore more and indulge in undesirable sexual behaviours. Investigator conveyed the need of the study which is again the need of the hour by explaining the current scenario of the Indian adolescents, the problems faced by adolescents due to lack of knowledge from ill-informed sources. Investigator also convinced the study is culture friendly and age-appropriate. After repeated discussions, head masters gave their approvals (Appendix - IV) and ensured their cooperation for the conduct of the study.

Investigator further discussed with heads of both schools about the necessary arrangement such as time and place allotments and helper assignments. Times allotted for each group were scheduled in different slots so that investigator can easily conduct the programme without any disturbance. After all the preliminary arrangement, investigator started to conduct the study involving three steps namely collecting data, imparting education programme and collecting post-education data.
Phase II- Collection of preliminary data

At the outset, investigator built rapport with the respondents, meanwhile got their consent before the actual conduct of the study. She oriented the study in brief like, the type of the information that is being acquired and its purpose, how they were expected to carried out and potential benefits from the study.

The investigator collected first hand information by using the self-developed tool from the selected 782 samples in the allotted time and place. The specific data on the Knowledge, Attitude and Practice of adolescent reproductive health were also collected subsequently. Before answering the questions, the respondents were requested to read carefully and understand the questions and respond accordingly in the space provided for responses. They were requested to be honest with their answers. The fill-up tools were collected back.

Phase III - Development of module

An educational package was developed to enhance adolescents knowledge and bring a desirable changes in attitude thus to strengthen the quality of practices on the sexual and reproductive health care.

In the development of the module, the following steps were adhered to.

- Framing the objectives
- Development of the content
- Scrutiny of the content
- Finalizing the content
- Developing the teaching aids
- Documenting the module

Framing the objectives

The following objectives were taken into consideration in preparing the module.

- Provide basic information on various aspects of adolescent sexual and reproductive health areas.
- Enable adolescents to understand the consequences of indulging in unsafe practices and risky sexual behaviours
Methodology

- Facilitate adolescents to clarify the pertaining myths and misconception relating to sexual and reproductive health.
- Help them to adopt a hygienic and safe practice on sexual and reproductive health areas.
- Render activities for participation and self involvement for the better outcomes.

Development of content

The content of the module was framed based on guidelines provided by UNESCO for the school based intervention programme of adolescents sexual and reproduction health care. To make it suitable for the Indian context, investigator reviewed textbooks, journals, and other educational packages available.

The contents collected were simplified in order to provide an objective oriented, age-appropriate and culture –friendly intervention with essential details and avoiding over loading with excessive information.

Scrutiny of contents

The developed contents were scrutinized by the experts of the related fields and school teachers. Constructive suggestions rendered by them were noted and modifications were implemented.

Finalizing the content

The modified contents were finalized and formatted in clear, understandable and succinct way. The content is listed below.

I. ADOLESCENT GROWTH AND DEVELOPMENT

Module – 1: Introduction
- Definition of adolescence
- Developmental tasks of Adolescents
- Developmental Changes during adolescence- physical, sexual, emotional and psychosocial changes
- Developmental milestone of puberty
Methodology

Module – 2: Menstruation

- Understanding female Reproductive system
- Physiology of Menstruation
- Menstrual hygiene and care practices
- Menstrual disorders and their Management
- Myths and misconception related to Menstruation

Module – 3: Nutrition during Adolescence

- Importance of nutrition during adolescence
- Balance diet and food groups
- Role of micro nutrients in adolescents Reproductive health
- Factors that influence adolescents’ nutritional needs

II. ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH

Module – 1: Introduction

- Defining and understanding related terms

Module – 2: Adolescent Sexual Behaviors

- Factors those are associated with adolescents’ early sexual experience
- Risks and consequences of early sexual involvement
- Prevalent myths related to sexual and reproductive health and their impact

Module – 3: Adolescent Pregnancy and Abortions

- Factors associated with occurrence of adolescent pregnancy
- Risks and consequences of adolescent pregnancy – both mother and child
- Risks and consequences of abortions during adolescence
III. HIV / AIDS AND ADOLESCENTS

Module -1: Introduction

- Meaning and definition
- Basic facts and information on HIV/AIDS
- Ways of transmission and prevention
- Creating a supportive environment to remove discrimination.

Developing teaching-aids

The teaching aids which were used in imparting the module were developed. Various teaching aids such as power point presentation slides, charts, flipcharts, posters, story, pamphlets, situational statements, video clips were developed according to the topic.

Documenting the module

Incorporating all the above features, the module were developed and documented.

Phase IV- Imparting Reproductive Health Education Programme

"Reproductive health education Programme" was imparted among the selected adolescent girls with the objective to enhance their knowledge, bring desirable changes in their attitude and strengthen the quality of their practices on various aspects of sexual and reproductive health issues.

Investigator conducted 30 consecutive classes for 50 minutes each session for the selected students. Education programme was participatory type and activities-oriented. The details of the education programme are shown in table V.
### Table V

**Schedule for Reproductive Health Education Programme**

<table>
<thead>
<tr>
<th>Day</th>
<th>Topic</th>
<th>Methods</th>
<th>Teaching aids/ Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Introduction to adolescence</td>
<td>Lecture, Chalk &amp; Talk, Brainstorming, Demonstration, Seminar, presentation, Discussion, Interactive lecture, Games (making charts), Role play, Dramatization, Story-telling, Group Discussion, Video show, Pick and speak, Statement analysis</td>
<td>PPT, Chart, Flipchart, Slides, Blackboard, Charts, Poster, Video clip, Statement cards, Situation cards, Story-aids, Case</td>
</tr>
<tr>
<td>Day 2</td>
<td>Pubertal changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 3</td>
<td>Developmental milestone of puberty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 4</td>
<td>Emotional and psychosocial changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 5</td>
<td>Importance of nutrition during adolescence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td>Balance diet and food groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 7</td>
<td>Role of micro nutrients in adolescent reproductive health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 8</td>
<td>Factors influencing adolescents’ nutrition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 9</td>
<td>Understanding Reproductive system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 10</td>
<td>Basic aspects of menstruation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 11</td>
<td>Menstrual hygiene and care practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 12</td>
<td>Myths and misconception related to Menstruation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 13</td>
<td>Management of menstrual problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 14</td>
<td>Adolescent sexual behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 15</td>
<td>Factors associated with adolescent sexual experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 16</td>
<td>Early sexual involvement - risks and consequences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 17</td>
<td>Prevalent myths related to sexual health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 18</td>
<td>Age at marriage and parenthood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 19</td>
<td>Understanding adolescent pregnancy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 20</td>
<td>Adolescent pregnancy - Factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 21</td>
<td>adolescent pregnancy - Risks and consequences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 22</td>
<td>Abortion during adolescence and their consequences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 23</td>
<td>HIV/ AIDS - Basic facts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 24</td>
<td>Mode of HIV/ AIDS transmission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 25</td>
<td>Risk Behaviour of HIV / AIDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 26</td>
<td>Mode of prevention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 27</td>
<td>Clarification of Myths and misconceptions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 28</td>
<td>Creating a supportive environment to remove discrimination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day 29 - 30</td>
<td>Discussion and queries</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The classrooms provided were spacious enough to conduct any kind of activities. However in one of the Government Girls Higher Secondary, some activities such as group discussion and group works were conducted in school ground due to lack of space in the provided class rooms.

The respondents in both schools were very enthusiastic and enjoyed every activities conducted throughout the whole sessions.

**Phase V- Evaluation of the education programme**

After imparting education programme, the KAP scale was re-administered to the respondents to find the efficacy of the education programme. The post education data were collected from the total sample of 782 adolescent girls both control and experimental groups.

**D. ANALYSIS OF THE DATA**

Data analysis is considered to be important step and heart of the research in research work. Analysis of data is a process of interpreting and drawing conclusions from data gathered in order to discover inherent facts. The collected information was consolidated, coded, scored and tabulated accordingly providing a raw data which were ready to be analyzed. The data were analyzed statistically to yield the desired results by using class intervals, frequency distribution count and percentage analysis, Multiple Regression analysis, ‘t’ test and ANOVA which revealed the relationship between the independent and dependent variables considered in the study.

Class interval was used to provide the score range for classification of levels of adolescent’s knowledge, attitude and practice of reproductive health aspects. The frequency distribution count and percentage analysis were used to provide summary information about the distribution, variability and central tendency of the variables.

Multiple Regression analysis was performed to examine the various potential predictors of socio-demographic factors on adolescent’s reproductive health parameters (knowledge, attitude and practice) with specific reference to all four selected aspects studied - pubertal changes and menstruation, sexual
Methodology

conduct and behaviour, early marriage and adolescent pregnancy and HIV/AIDS.

Paired ‘t’ test was executed to discover the impact made by the RHEP intervention among the student population by comparing the mean scores of adolescent’s knowledge, attitude and practice on reproductive health aspects before and after the intervention.

The one way ANOVA procedure produces a one-way analysis of variance for a quantitative dependent variable by a single factor (independent) variable. In the present study, this test was employed to find out the impact of RHEP among the study groups by comparing the post-education data of control and experimental group.

For all statistical tests, the level of significance was tested at .05 and .01 levels of significance. If the result is significant, it is denoted by ‘*’ (.05), ‘**’ (.01) and superscript of ‘ns’ in the value (if not significant).

Ethical consideration

The present study was subjected to Institutional Human Ethics Committee and was approved for the same bearing the approval number – AUW/IHEC/HD-17-18/XPD/31. (Appendix-V)
Methodology at a Glance

A. Population and Sampling

I – Selection of locale
Coimbatore District
Tamil Nadu State

II – Selection of Schools
North (6 Schools)
West (6 Schools)
South (6 Schools)
East (6 Schools)

24 Schools from 4 zones
3 Schools from each zone - 12 schools were selected randomly

Experimental group
(389 Sample)

Control group
(393 Sample)

Random sampling

III – Selection of sample
Adolescent girls (13-17 years)

All students of 8th, 9th, & 11th std. from both schools shortlisted (n1=406, n2=413)
Total 819 adolescent girls

782 Adolescent girls consented voluntary participation

2 Schools extended willingness
Impact of Reproductive Health Education Programme (RHEP) among adolescent girls – an intervention study

Methodology

Figure 1b

**Methodology at a Glance**

**Tools devised**
- Questionnaire to elicit background information
- Questionnaire to assess adolescent’s sources of information on reproductive health
- Adolescent Reproductive Health KAP scale

**Conduct of the study**
- Rapport Building
- Preliminary Data Collection
- Development of Module
- Imparting RHEP
- Post RHEP Data Collection

**Steps in Development of Module**
- Framing the objectives
- Development of the content
- Scrutiny of the content
- Finalizing the content
- Developing the teaching aids
- Documenting the module

**Scale to assess Knowledge on** –
- Pubertal changes and Menstruation
- Sexual conduct and Behaviour
- Early marriage and adolescent pregnancy
- HIV / AIDS

**Scale to assess Attitude on** –
- Pubertal changes and Menstruation
- Sexual conduct and Behaviour
- Early marriage and adolescent pregnancy
- HIV / AIDS

**Scale to assess Practice on** –
- Pubertal changes and Menstruation
- Sexual conduct and Behaviour
- Early marriage and adolescent pregnancy
- HIV / AIDS