CHAPTER - 3

METHODOLOGY

Methodology decides the nature, plan and procedure of the study. As such it is considered as main body of any research. Research methodology is a way to systematically solve the research problem. It may be understood as science of studying how research is done scientifically. In this chapter various steps have been included, that were adopted by the researcher. This study is an experimental study, where in Information, Education and Communication (IEC) package on various selected Reproductive Health aspects was developed. For improving knowledge of tribal women regarding different selected aspects of Reproductive Health. The main objective of the present study was to test and implement this reproductive IEC package among the tribal women developed by the investigator. The knowledge of respondents was studied before and after the implementation of IEC package. It is necessary for a researcher to know, not only the development of certain indices or tests but also how to calculate the data using various techniques like mean and t - test. Thus, methodology is not only the research methods but also considers the logic behind the methods that is used in context of research study and explains why and how researcher used a particular method or technique. A broad distribution of the materials, methods and procedures followed in conducting the study is furnished under the following headings:

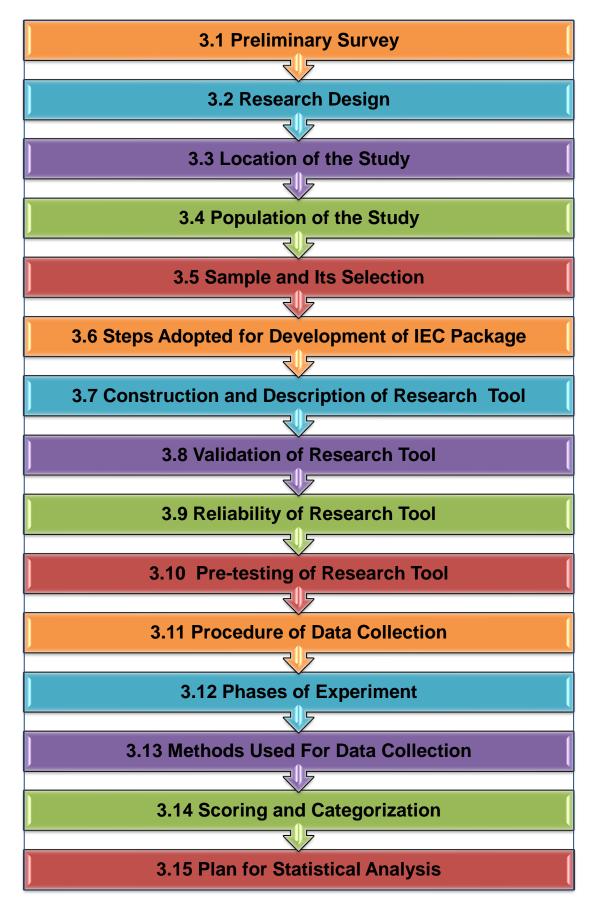


Figure 1: Steps Involved in the Methodology

3.1 Preliminary Survey

3.1.1 Topic of Preliminary Survey: "Assessment of Knowledge on Reproductive Health from Tribal Women of Pratapgarh District (Rajasthan)"

3.1.2 Objectives of the Preliminary Survey

- **1.** To Assess Profile of all the Selected Villages.
- 2. To Assess Socio-Economic Status of Tribal Women of Selected Area.
- **3.** To Assess the Knowledge of Tribal Women on selected Reproductive Health Aspects:
 - A. Meaning and Concept of Reproductive Health of Women.
 - B. Knowledge About Basic Components of Reproductive Health of Women.
 - C. Anatomy of Female and Male Reproductive System.
 - **D.** Process of Conception to Childbirth.
 - **E.** Maternal Care.
 - **F.** Sexually Transmitted Diseases.
 - G. Reproductive Tract Infections.
 - H. Family Planning.
- **4.** To Identify General Health Practices Prevalent amongst Tribal Women of Selected Area.

3.1.3 Delimitations of Preliminary Survey

- 1. The preliminary survey was delimited to the tribal women only.
- 2. The preliminary survey was delimited to Pratapgarh District of Rajasthan only.

3.1.4 Location of Preliminary Survey

The present preliminary survey was conducted in Pratapgarh district of Rajasthan state. Pratapgarh district has five Tehsils (including Pratapgarh), namely; Choti Sadri, Dhariyavad, Pratapgarh, Arnaud and Pipalkhunt. Total 30 villages were found as underdeveloped villages and 956 as developed villages. Out of the 30 underdeveloped villages, 10 tribal dominated underdeveloped villages were randomly considered for preliminary study.

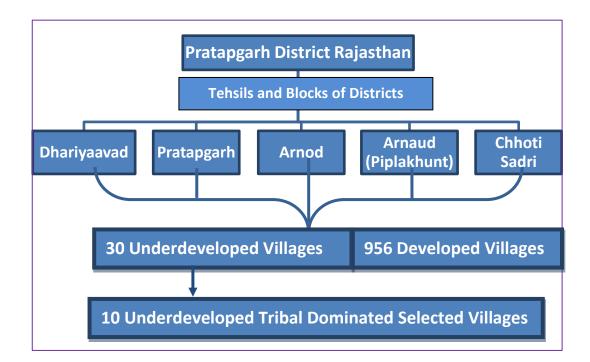


Figure 2: Selection of Location for Preliminary Survey

3.1.5 Sample and its selection for Preliminary Survey

The requirement of sample was fulfilled from 10 selected tribal dominated under developed villages. Purposive sampling technique was used for preliminary study. Total **150 tribal women** from selected villages were included to generate preliminary data. **15 tribal** women from each of the village (who were willing to participate and conveniently available) were considered for the preliminary study

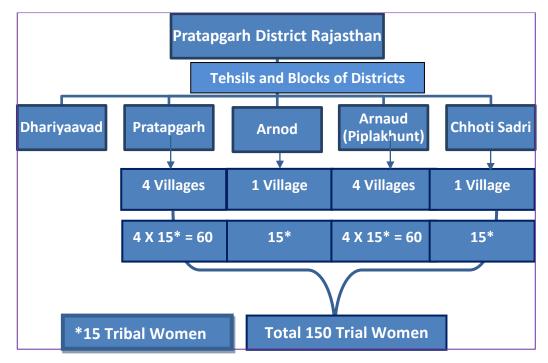


Figure 3: Selection of Sample for Preliminary Survey

3.1.6 Tools and Descriptions of Preliminary Survey: An *Interview Schedule* was developed consisting of following sections:

Part I: Village Profile

This section of the interview schedule consisted questions pertaining to the profile of the villages which was filled with the help of *"Sarpanch"* of the respective villages.

Part II: Background Information of the respondents

- A. Demographic Information of the Respondents: This section was developed to get necessary details regarding the respondents and their families. This section consisted of eliciting information related to the age, education, marital status, and occupation etcetera of the respondents.
- B. Socio-Economic Status of the Respondents: This section of interview schedule was developed to have the details of their Socio – Economic status for example their family income, media accessibility and landholdings etcetera.

Part III: Knowledge of Reproductive Health Aspects: This part of interview schedule included questions related to all the selected aspects of Reproductive Health, which were as follows:

- A. Meaning and Concept of Reproductive Health of Women
- B. Knowledge About Basic Components of Reproductive Health of Women
- C. Anatomy of Female and Male Reproductive System
- D. Process of Conception to Childbirth
- E. Maternal Care
- F. Sexually Transmitted Diseases
- G. Reproductive Tract Infections
- H. Family Planning

Part IV: General Health Practices: Various Health Practices prevalent among the selected respondents were collected through **Observation Method**.

3.1.7 Data Analysis of Preliminary Survey: Data was analyzed using frequencies and percentage distribution and mean percent scores of the respondents related to Socio – Economic Status and Overall Knowledge of the respondents regarding different selected aspects of reproductive health.

Data was analysed using frequency and percentage distribution and mean percent score of the respondents related to socio – economic status and overall knowledge of the respondents regarding different selected aspects of reproductive health.

Three categories were prepared for socio-economic status viz; low, medium and high by dividing maximum possible score after equal interval distribution of the score and the similar way was used to divide respondents for Reproductive Health aspects viz; low level of knowledge, medium level of knowledge and high level of knowledge.

3.1.8 Major Findings of Preliminary Survey

Part I: Village Profile: The profiles of the selected villages are described in following Table 4.

Name of the villages	Nanirail	Amarpura	Amlikheda	Odvada	Piplya
Geographical area of the	Approximately 2 -2.5	Approximately 4 Km	5-6 Km	3-4 Km	3-3.5 Km
village	Km		Approximately	Approximately	approximately
Population of the village	570	600 approximately	945 Approximately	425	342 approximately.
				Approximately	
Panchayat Samiti	Pratapgarh	Pipalkhunt	Pratapgarh	Arnod	Arnod
Educational Facilities	Primary School (1)	Not available	Middle school	Middle School (1)	Not available
Health Facilities	Not available	1 PHC and one doctor	One PHC available	Not available	Not available
Water Supply	Not available (fulfill by	Handpumps and wells	Not available (fulfill	Available	Not available
	wells)		by wells)		
Power Supply	Not available	Available	Available	Available	Not available
Post and Telegraph	Not available	Not available	Not available	Not available	Not available
Approach Facility	Partially kacchi road	Road is available	Partially kacchi	Available	No road up to 3 KM
			road		
Media Exposure	Only Radio is available	Radio, TV and News	TV only available	TV, Newspaper	Not available
		Paper available		and Radio	

Table 1: Profile of the selected villages

Continued to next Page.....

Table 4 continued from Page number 85

Name of the villages	Chayan	Timarva	Chamravada	Badilak	Kerwas
Geographical area of the village	2-2.5 Km approximately	5-6 Km. approximately	7-8 Km approximately	4-5 Km approximately	Approximately 4- 6 Km
Population of the village	345	500 approximately	1250	542 approximately	800 approximately
Panchayat Samiti	Pipalkhunt	Arnod	Choti sadri	Choti sadri	Pratapgarh
Educational Facilities	Primary School (1)	Primary School	Middle school	Primary school	Secondary School
Health Facilities	Not available	Not available	1 PHC	One sub Health Center	1 PHC and one ANM
Water Supply	Not available	Not available (fulfill by wells)	Available	Governmental thrice in a week	Hand pumps and wells
Power Supply	Not available	Available	Available	Not available	Available (Occasionally)
Post and Telegraph	Not available	Not available	One Sub post-office	Not available	Not available
Approach Facility	Partially kacchi road	Road is available	Connected to main road	2 Km from village	Road is available
Media Exposure	Only Radio available	TV available	Radio, TV, Newspaper available	Not available	Radio and TV

Part II: Background Information of the Respondents

A. Demographic Information

Table 2: Frequency and Percentage Distribution of the respondentsaccording to their Background Information(n = 150)

S. No.	Demog	raphic Information	f	%
1.	Age (In Years)	18-30 years (Young)	24	16
		31-45 years (Middle)	78	52
		46-60 years (Upper middle)	35	23
		Above 60 years (Old)	13	9
2.	Marital Status	Unmarried	17	11
		Married	97	65
		Widowed	13	9
		Divorced	23	15
3.	Education	Illiterate	80	53
		Can read and Write	35	23
		Primary	20	13
		Middle	9	6
		Secondary / higher secondary	4	3
		Graduate and above	3	2
4.	Occupation	Non-wage earner	27	18
		Labour	69	46
		Farming	44	29
		Service & enterprise	10	7

Age

It was found that more than half of the respondents (52%) were from middle age group i.e. 31 - 45 years followed by nearly one fourth respondents (23%) belonged to upper middle age group i.e. (46 – 60 years). Very few of them belonged to younger (18 – 30 years) and older (above 60 year) age group respectively.

Marital Status

Majority of the respondents were married i.e. 65 %. Very few numbers of respondents i.e. 15 percent and 11 percent were found as divorced and unmarried respectively. Very few of them found widow (9%).

Education

As per the **National Family Health Survey IV**, sixty percent women in India are illiterate, where as 36 percent mother of children found to be educated up to primary and middle level. In this survey it was found that, more than half of the respondents (53%) were illiterate. Nearly one third of them were able to read the newspaper and write their name. Thirteen percent respondents were educated up to the 5th standard. Very few respondents (6%, 3% and 2%) were educated up to the middle level, secondary and higher secondary and graduation level.

Occupation of the respondents

Regarding occupation of the respondents it can be concluded according to Table 5 that, 46 percent respondents were farm labour. Twenty nine percent respondents were occupied with farming. Among the rest of the respondents only eighteen percent respondents were non-wage earner and very few of them (7%) were either doing service or had their own enterprise.

S. No.	Categories	f	%
1.	Low Socio-Economic Status	103	68.67
2.	Medium Socio-Economic Status	41	27.33
3.	High Socio-Economic Status	6	4

Table 3: Frequency and Percentage Distribution of the respondentsaccording to their Socio-Economic Status(n = 150)

B. Socio – Economic Status: It is evident from Table 6 that majority of the respondents (69%) belonged to low socio-economic status, followed by 27 percent respondents who were in medium socio-economic status. Only four percent respondents belonged to high socio-economic status.

Part III – Knowledge of Tribal Women on Basic Reproductive Health Aspects

S. No.	Aspects of Reproductive Health	Distribution of respondents as per MPS (Mean % Score) for Knowledge level					
		f	Low (0-33.3) %	f	Moderate (33.4-66.6) %	f	High (66.7 – 100) %
1.	Meaning and Concept of Reproductive						
	Health of Women	86	57.33	47	31.33	17	11.33
2.	Basic Components of Reproductive Health						
	of Women	75	50	51	34	24	16
3.	Anatomy of female and male reproductive						
	system	105	70	30	20	15	10
4.	Process of Conception to Childbirth	90	60	45	30	15	10
5.	Maternal care	70	46.66	53	35.33	27	18
6.	Sexually Transmitted Diseases (STDs)	128	85	14	9.33	9	6
7.	Reproductive Tract Infections (RTIs)	140	93.33	6	4	4	2.66
8.	Family planning	75	50	58	39	17	11

Table 4: Frequency and Percentage Distribution of the Respondent Regarding Knowledge of Reproductive Health Aspects(n=150)

It was concluded that maximum number of respondents (93 % and 87%) had low knowledge about RTIs and STDs (respectively), followed by 70 percent respondents who had low level of knowledge regarding anatomy of male and female reproductive system. 60 percent had low knowledge about the process of conception to childbirth followed by 57 percent respondents who possessed low knowledge about meaning and concept of reproductive health of women. A similar number of respondents (50%) had low level of knowledge about basic components of reproductive health of women, family planning and maternal care (Table 7).

Part IV: General Health Practices Prevalent Among Selected Respondents

- 1. Alcohol Consumption: It has been observed that the tribal women of two villages named, "*Nani Rail*" and "*Kheroda*" used to consume alcohol during their pregnancy and lactation period. The reason behind alcohol consumption was related to their religion. They use to consume alcohol as blessings of goddess "*Durga*" in form of "*Prasad*", with the belief that it will keep their child safe and they can get a son from its consumption. The quantity noticed one table spoon, thrice a week.
- Breast Feeding Practices: It is another belief noticed in that area that a woman should breastfeed her child after 12-14 hours of delivering a baby. Because, they think the mammary gland takes 12-14 hours to secrete milk.
- **3. Practices Related to Sexual Intercourse:** The major practice prevalent that a couple may have sexual intercourse during a woman's pregnancy and also after a month of childbirth, without any precaution. It was also found that they don't prefer gap to have sexual intercourse after their wife's delivery, because it may lead to more pain while sexual intercourse after a long gap.
- **4. Food and Diet Related Practices:** They don't provide food to lactating women for 12-14 hours after delivering a baby, because they believe that a lactating woman will not be able to digest food, because of weaken digestive system due to childbirth.

- 5. Tobacco Consumption: They use to consume tobacco at the time of pregnancy and lactation both. Because they don't feel satisfied without taking it. They also feel constipated, and complain of digestion problems when restricting tobacco consumption.
- 6. Practices related to Family Planning: The women (who perform manual abortion) of selected area specifically *"untrained dai"* believe that other method of abortion can harm their body and also weaken their reproduction capacity, hence they do abortion by cleaning uterus with their hands.

3.1.9 Conclusion of Preliminary Survey

It was found that there is enormous caste and class diversity in the selected villages of Pratapgarh District of Rajasthan, and with its different profile related conditions. In line with that 'Low Socio-Economic Status' of the selected respondents may also be responsible for their poor or ill health and low knowledge of various reproductive health aspects. This diversity in different places of Paratpgarh District of Rajasthan state, and on the basis of available review of literature, it can be said that no single and complete package regarding all the necessary aspects of reproductive health for tribal women has been made. Therefore, it can be concluded that a good and complete package consisting all the necessary and related Reproductive Health aspects should be designed and implemented to overcome the gap between knowledge of women with various Reproductive Health issues can be bridged.

Thus, a development of an all-inclusive Reproductive Health Package was planned to be implemented in the present investigation with having following process, to address reproductive health needs to bring about a change in focus topdown and improve quality of life from perspective of the Reproductive Health of tribal women. This effort of developing a package addresses the relationships between reproductive health and communities by examining two sub-points: factors that determine reproductive health and why reproductive health is important to a woman. On the basis of all this, it can also be said that knowledge on overall aspects of Reproductive Health altogether only fulfils the need of overall development of women in regards to reproductive health. Moreover, a package (which will include almost all the aspects of Reproductive Health of women) will definitely provide a congenial environment to improve the quality of Reproductive Health of women. Hence this study has been planned to develop an educational package for Reproductive Health of tribal women. With viewing all the above, the present study has been planned with its various proceedings.

3.2 Research Design

The research design for the present study was Experimental research - single group pre-test post-test design. The Information, Education and Communication (IEC) package developed containing various aspects on "Reproductive Health" was the "treatment", used for the experiment. In this design a single group is pretested, undergoes treatment (intervention package) and finally post-tested.

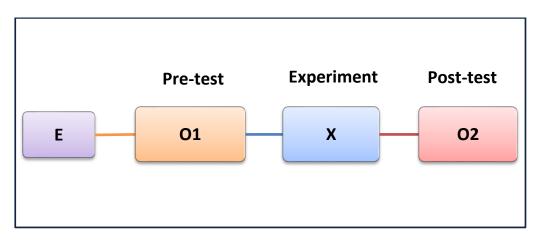


Figure 4: Single group Pre-test, Post-test Experimental Design

A single group pre-test and post-test experimental design was used in the present study. The experimental (E) group reveals the effectiveness of the package. In this research, the dependent variable was measured before the independent variable applied and then the amount of any change was computed. The experimental group (E) was pre-tested (O1 denotes pre-test) with the help of interview schedule. then it was exposed to educational intervention (X denotes implementation of IEC Package) that was Information Education and Communication Package which includes electronic, print and edutainment media such as posters, charts, booklets, power point presentation (slides show), video films and games. Later on, experimental (E) group was post-tested (O2 denotes post-test). The difference between mean scores of the pre-test and post-test of experimental group was than compared.

3.3 Location of the Present Study

Pratapgarh district includes five Tehsil (including Pratapgarh), namely: Choti Sadri, Dhariyavad, Pratapgarh, Arnaud and Pipalkhunt. All of these Tehsils also have their respective Panchayat Samiti headquarters.

There are a range of tribal villages in each of the panchayat samitis of Pratapgarh district. All of them include developed and under developed villages. On the basis of preliminary data out of all the selected villages' one village named **"Kerwas"** from **Pratapgarh Panchayat Samiti** was considered for the present investigation. This village has 100 percent tribal predominated population and is also adopted by the **"Krishi Vigyan Kendra"** on the basis of its tribal population. **"Kerwas"** village was 11 km far from the Panchayat Samiti Headquarter (Pratapgarh) and 3 km interior from the main transportation route (Refer Map No. 2, Appendix 2).

The selected village has less health care facilities, though one Primary Health Centre was there, but was on partially working condition. This village was also lacking in transportation facility, as it was not directly connected to the main transportation road. The municipal water supply and media exposure was also quite low in the selected village.

3.3.1 Village Profile:

Kerwas is a medium size village located in Pratapgarh district of Rajasthan state, with total 190 families residing. The Kerwas village has population of 968 of which 490 are males while 478 are females as per Population Census 2011.

In Kerwas village population of children with age 0-6 is 189 which make up 19.52 % of total population of village. Average Sex Ratio of Kerwas village is 976 which is higher than Rajasthan state average of 928. Child Sex Ratio for the Kerwas as per census is 817, lower than Rajasthan average of 888.

Kerwas village has higher literacy rate compared to Rajasthan. In 2011, literacy rate of Kerwas village was 72.14 % compared to 66.11 % of Rajasthan. In Kerwas Male literacy stands at 88.08 % while female literacy rate was 56.49 %.

As per constitution of India and Panchyati Raaj Act, Kerwas village is administrated by Sarpanch (Head of Village) who is elected representative of village.

Particulars	Total	Male	Female
Total No. of Houses	190	-	-
Population	968	490	478
Child (0-6)	189	104	85
Schedule Caste	0	0	0
Schedule Tribe	968	490	478
Literacy	72.14 %	88.08 %	56.49 %
Total Workers	499	246	253
Main Worker	340	62,838	0
Marginal Worker	159	36	123

Table 5:	Profile	Data o	of Kerwas	Village
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Source: http://www.census2011.co.in/data/village/108686-kerwas-rajasthan.html

3.3.1.1: Caste Factor

In Kerwas village, the village population was found as Schedule Tribe (ST). They constitute 100.00 % of total population in Kerwas village. There is no population of Schedule Caste (SC) in Kerwas village of Pratapgarh District.

3.3.1.2: Work Profile

In Kerwas village out of total population, 499 i.e. 68.14 % of workers described **Farming** as their main occupation (Employment or Earning more than 6 Months) while 31.86 % were involved in Marginal activity providing livelihood for less than 6 months. Of 499 workers engaged in Main Work, 268 were cultivators (owner or co-owner) while 48 were Agricultural labourers.

3.4 Population of the Study

Tribal population is the most important yet negligible part of our society. Empirical statements show that a remarkable number of populations in India comprise of tribal communities and mainly they are residing in the rural India. As discussed earlier, it can be concluded on the basis of review of literature that tribal population of India are most vulnerable group of our society from health point of view (especially tribal women), hence on the basis of felt needs the tribal population of "KERWAS" village of Pratapgarh District of Rajasthan, India is considered for the present study.

3.5 Sample and Its Selection

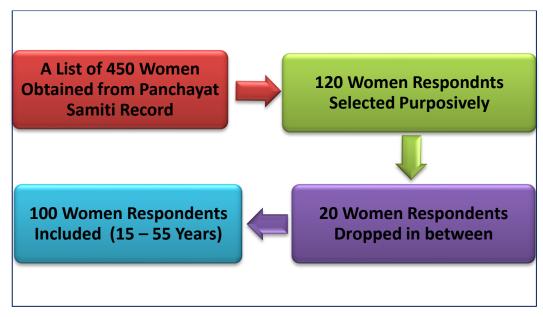


Figure 5: Sample and its Selection

The sample of the study comprised of 100 tribal women of "Kerwas" village. Prior information was taken from the Panchayat Samiti of the selected village. With the help

of panchayat samiti office record, a list of 450 registered women was taken. On the basis of obtained list, purposive sampling technique was used to select tribal women respondents as per their willingness to participate in the present study. 120 women were considered for the present investigation as they were ready to participate in the research study. Total 120 Interview Schedule was used to take necessary information from tribal women of selected village, out of which 20 women respondents refused or dropped in between the experiment. Lastly 100 women respondents between 15 - 55 years of age completely participated in the study hence considered as data producing sample for present study.

3.6 Steps Adopted for Development of IEC (Information Education and Communication) Package:

This package included selected aspects related to Reproductive Health of women. The development process of this package has gone through many systematized steps.

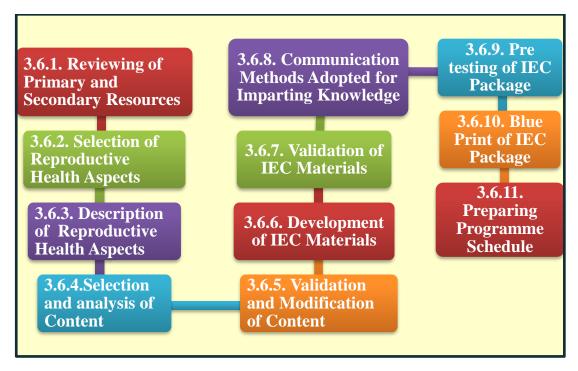


Figure 6: Steps Adopted in Development of IEC Package

The first and foremost step of the process was to analyze its different components/subtopics; and sequencing the content in logical order. This was

followed by formulating objectives in terms of behaviour. The next step was the preparation of criterion test to find out extent to which the instructional objectives have been achieved. This was followed by selection of the "best" set of instructional inputs in accordance with the different aspects / components of the instructional situations namely characteristics of learners, size of the group, availability of resources, feasibility aspects etcetera. the selection of the "best" set of instructional inputs is followed by sequencing and preparing of the instructional material. The developed material was tried out on a small sample known as "Laboratory Try Out", to find its effectiveness in terms of objectives and to modify it if necessary. Then the material was ready for the final try out called "Field Try Out". All these steps involved in the process of developing the instructional educational material given in **Figure: 9** each phase of the process is discussed in detail in the following paragraphs.

This step was further classified in other categories which were procedural steps for the package development as:

3.6.1 Primary and Secondary resources review: The available literature on the reproductive health of women was reviewed for developing a package. A list of topics curled out from the primary sources. The primary data sources used were the researches done in the area of women and their reproductive health concerns. The secondary data sources were selection, optimization and its adoption by the other scholars and researchers with the help of readings from Books, Journals, News Papers and Newsletters.

3.6.2 Selection of aspects related to "Reproductive Health"

The master list was than prepared with having major topics, which were included, are shown in Figure: 10

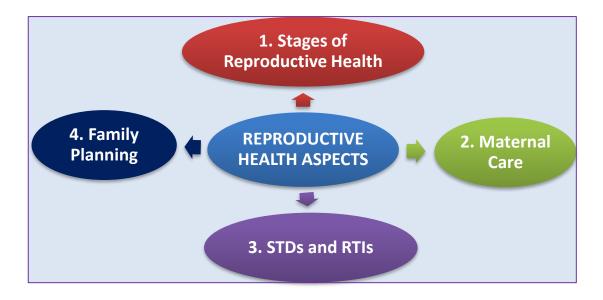


Figure 7: Selection of Aspects Related to Reproductive Health

3.6.3 Description of Reproductive Health Aspects: Various Reproductive Health Aspects further divided into various sub aspects, which is depicted in the table given below:

Table 6: Descriptions of Selected Aspects of Reproductive Health

S. No.	Description of Selected Aspects of Reproductive Health
А.	Stages of Reproductive Health of Women
	• Puberty and changes during adolescence
	• Anatomy of female and male reproductive system
	• Menstruation and menstruation cycle
	• Menopause
В.	Maternal Care
	Process of Reproduction
	• Pregnancy Symptoms, Stages and Child birth process
	• Prenatal / Antenatal and Postnatal/ Postpartum
C.	Sexually Transmitted Diseases (STDs), Reproductive Tract
	Infections (RTIs): Types, Causes, Symptoms and Prevention
D.	Family Planning: Methods, Types of Contraceptives, its use and
	importance

3.6.4 Selection and analysis of content: After reviewing the literature available on reproductive health of women, a set of content was selected on the entire subtopics emerged after selection of major Reproductive Health Aspects. The content was selected by keeping in mind the objective of the study, need and characteristics of tribal women, so that objectives of study can be fulfilled.

The content was selected and analysed with covering all the aspects covering each category of reproductive health concerns of women as none of the aspects could be dropped. Looking forward to this, content was collected and developed keeping in mind the necessary selected Reproductive Health Aspects.

3.6.5 Validation and modification of content:

After selection and analysis of the content, experts and specialists of different fields affiliated to the topic were approached for the validation of content selected. The experts were selected on the basis of their working experience (at least 2 - 3 years' experience) in the respective fields'. The kind and numbers of experts selected are given below:

Field of specialization	No. of Experts
Gynecologists	2
Research Expert	1
Language expert	1

The suggestions and feedback on the content was sought from the experts on the basis of certain pre-selected criterions, so as to avoid any ambiguity as well as to assist experts in the process. The content was to be examined and judged by the experts on following listed criterions:

- Appropriateness of content
- Suitability to the target group
- Conceptual clarity and
- Clarity of language

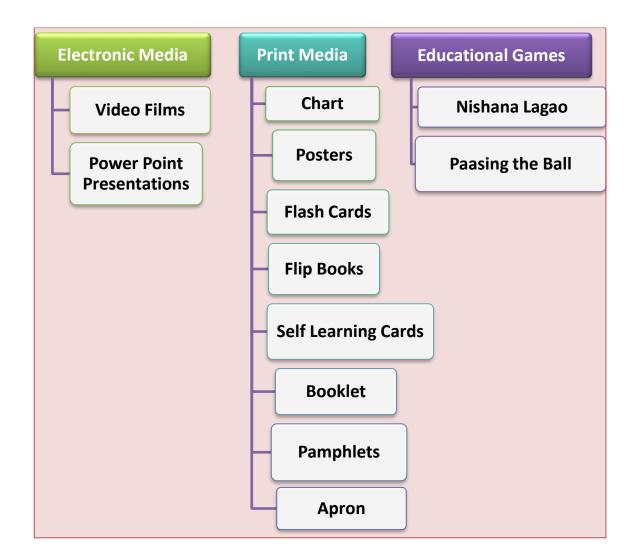
After taking feedback and comments of experts on the content, all the necessary and appropriate corrections were made and modified for the final usage.

3.6.6 Development of Instruction Education and Communication Materials:

For the intervention of each of the aspects and sub-aspects, the supportive material is the backbone of any of the intervention programme. Without this one cannot impart knowledge or disseminate any information in a proper and efficient manner. Hence, the communicator cannot improve the knowledge and awareness level of the target group. The supportive materials always serve better to display as well as help transacting the content in easy and efficient way. Therefore, they can be used for multiple purposes while disseminating any information.

In the present investigation, the complete package was developed. Here the package means compilation and development of various supportive materials like Charts, Posters, Flash Cards, Flip books, Pamphlets and many more. It is well known that the use of such Instruction Education and Communication material can always provide a way of interaction for successful learning and gain in knowledge.

For the mentioned aspects and sub-aspects of Reproductive Health following IEC material (Audio-Visual Aids) were prepared and used for the present study. The methods and materials developed and used for the intervention programme for the present investigation are depicted in following diagrams.





3.6.6.1. Development of Electronic Media

3.6.6.1.1 Steps Followed to Prepare Video Film

The following steps were used to develop Video Film entitled *"Beti Sayani Ho Gayi"* on Menstruation.

A. Selection of Subject: Initially all the necessary content and materials were gathered with various sources like having meeting with experts from concern field, went to libraries, read newspapers, reviewed literatures, referred previous thesis and finally the subject "Menstruation" were selected to make video film on it.

- **B.** Arranging the sentences and preparing the scripts: After having content with a line a sequential arrangement was made to prepare the script with various characters, polishing was done to give final product unity and proportion and continuity.
- C. The drafting of full length scripts with a complete list of visual illustrations and accompanying sound. Descriptive type of commentary was written for video film on "Menstruation" named "*Beti Sayani Ho Gayi*".

The script was written with necessary headings and captions. An effort was made to use, understandable words in local language. Local dialects were incorporated while scripting. Script for video film was written. As the film has to be informative hence informative approach was used. For the script of video film Hindi and Rajasthani languages were used. This was done keeping in mind the objectives, content organization, the physical appearance of the characters and scenes (Pandya R 1994).

- **D. Preparation of video film:** Preparation of video film were done in the following four stages
 - a. Selection of characters and pre-production
 - b. Setup and rehearsal
 - c. Production (shooting of video film)
 - d. Post production (editing)
- a. Selection of characters and pre-production: At this stage of film making various required characters was selected from various fields. There were nine characters found out as per the requirement of script. After selection of the various characters the roles had been assigned to each of the participant and dialogues of the scripts were handed out to each one.

Another step of this was pre-production, in which the shooting team were finalized on the basis of their experience of shooting and indispensable equipment included but not limited to camera, camera roll focusing lights and camera stand.

b. Setup and rehearsal: The shooting place were decided in this step of film making. A village named "Ankhol" in Vadodara District was selected for the shooting purpose, as the village was fulfilling the requirement of shooting

scenario. Prior permission was taken from "Sarpanch" of the selected village than the necessary setup was done as per the requirements of shooting of various scenes.

Rehearsal is the heart of any shooting, without this the efforts cannot be made in the line as needed. After getting dialogues by each of the character of video film, the whole things were rehearsed number of times, until all the dialogues were remembered by the characters on the tip of tongue. The final rehearsal was done with proper dressings of each of the characters before shooting.

- c. Production (shooting of video film): After finalizing day, date, time and place of shooting the camera man and whole shooting team went to the decided place and done the setup with all the necessary requirements. Before that the team was undergone with the visualization of rehearsal, dress up and make up of the selected characters. After finishing this camera man had given instructions to the characters about the tips of acting.
- d. Post production (editing): After completion of two days shooting the editing was done. At this stage, all the scenes (as per the scripts) collected and sequenced after many takes retakes by the cameraman. Voice and dialogues was dubbed in a sound recording studio.

Final touch was given with synchronizing each and every scene with its commentary, background music, title of the film and name of the whole team was added with additional graphics. A thank you note was also given to all the team members who directly and indirectly participated in the film.

3.6.6.1.2 Steps Followed in Preparation of Power Point Presentations

Various Power Point Presentations were made on various topics like STDs, RTIs, Labor Process, Pregnancy Symptoms, and Development of Embryo etcetera. This was headed under following criteria:

a. Compilation of Content: The content related to the subject matter was collected through extensive review of literature on selected topics and subtopics from various resources. The content gathered from various sources than categorized and compiled for developing Power Point Presentations.

- **b.** Gathering of images and pictures: as it was mentioned earlier that this package was prepared for tribal women. Empirical data has also showed that most of them were illiterate; moreover, pictures and images make a quality understanding in human beings. Keeping in mind various topics and subtopics related pictures and images were fetched from various resources and finalized for further steps.
- **c. Preparation of Power Point Slides:** All the necessary content pasted on each of the slides of Power Point Presentation. This was than supported with various pictures, illustrations and graphics on various related issues.

3.6.6.2. Preparation of Print Media

3.6.6.2.1 Preparation of Charts

Charts on Pregnancy and Menopause and its symptoms were made and following steps were used for designing posters viz:

- **a.** Collection of Content and Images: After deciding the topics and subtopics, related content was collected from various sources like reviewing literature, books from various syllabi etcetera.
- b. Finalization of Content and Images: as per the technical points necessary content was selected and points were jotted down as per the need of the charts. Points were than finalized according to the subtopics and according to coverage of the whole topic.
- **c. Placements of the Content and Images:** Illustrations were made technically (with the use of computers and graphics) in the form of charts and headings and sub headings were mentioned. After this step images were placed in line with headings.
- **d.** Colour Combination and Printing: Lastly colour combination was finalized and printing of the charts were done.

3.6.6.2.2 Preparation of Posters

A Poster is always an effective means of communication of formal and nonformal teaching. As it is a visual form of communication and added focus on pictures, hence it allows the receiver to perceive the correct things in a correct manner. Here are some steps which have been used to design a poster.

- a. Selecting a Topic: choosing a topic is the essence of making any poster. This not only provides clarity but also help learner to sustain the knowledge gained through posters. Hence a careful selection of topic was done. Though the researcher cannot cover the whole subject in just one poster but the topic was divided in the subtopics and then the number of posters was decided.
- b. Selection of Layout and Designs: A clear illustrative layout was framed roughly to decide the placements of images and pictures. Title of the posters than mentioned clearly visible fonts with bright colours. Background colour and poster border was made lastly and final touch was given to all the posters.
- **c.** Computerization and Printing: After finalizing the layout and designing of posters and final printing was done. As some of the posters were handmade hence the colour combination was decided prior to the sketching.

Posters were made on Puberty and its symptoms, Menstrual Cycle, Process of Conceptions, Stages of Pregnancy and Development of Fetus and Diet during Adolescence, pregnancy and Lactation.

3.6.6.2.3 Preparation of Flip Book

Flip Book was made on Antenatal care. Flip book have the sustainable effect on the learners as well as it provides apparent group learning. Similar to posters flip book also contain more of the images and visual illustrations for a group of 15-30 person. Following steps were adopted to prepare a flip book.

- **a. Gathering of content:** As per the subject matter the whole content related to the decided subtopics were collected from the various related literature online and offline. As this is the world of digitization and computerization, it was decided to design the flip book with the help of computers.
- **b.** Organization and sequencing of content: Once the topic and subtopic of the flip book was decided the whole content was than sequenced and

arranged accordingly. It always been easy to draft any media after its arrangement in an order.

- c. Drafting, Designing and finalizing layout: After organizing the content a rough draft and layout was made with the help of computers graphics. Placements of the pictographic content were made with its specific decided size and layouts. A final touch has been given with putting title and captions to each of the image on every page and final touch has been given.
- **d. Printing and binding:** Digital printing of each page of the flip book has been done on a quality paper and lamination was done, after this all the pages were organized sequence wise and spiral binding was done.

3.6.6.2.4 Preparation of Flash Cards

Flash cards were made on Post-natal care of women. There is not much difference between flip book and flash cards. Flip book has its caption with images on same page while flash cards having story of the image behind it. Flash cards were made with the help of computer graphics and designing.

- **a.** Assortment of images: various images and pictures related to the topics and subtopics were collected and assorted according to the requirement of the topic and subtopics.
- b. Arrangement, titling and designing: After collection and finalization of images, the next step was to arrange the images in the sequence as per the requirements of the objectives planned, topics and subtopics. According to pre-decided subtopics the images were transformed to the pages of flash cards. Designing and visible layout was done and colours were also set with the help of computers.
- **c.** Writing up: After designing the images on each of the flash card the write up was planned behind each of the flash cards. According to the image a write up had been planned and printed.
- **d.** Arrangement of the content with the images: arrangement of all the images and its write up was than done accordingly.
- e. **Printing:** Final step of making flash cards was printing each card along with its write up.

3.6.6.2.5 Preparation of Booklet

A booklet was developed with having methods of contraception and various contraceptives, its usage, advantages and disadvantages. The procedure followed while making the booklets is as follows:

- a. Collection and choosing right Content: A booklet on Family Planning has been made with the help of computer graphics and designing. The first step followed for making this booklet was collection of the matter related to family planning methods and various contraceptives. From the various sources like, booklets, training modules, various websites all the written matter has been collected and synchronized in an order. After this scrutiny of the content has been done and necessary content was assembled in a word file.
- **b.** Sequencing of written material: a right sequencing was done by arranging all the written material in a file with the help of computer programme.
- **c. Titling and Illustration:** the next step was the titling of the material. In these step major and minor titles has been assigned as and where it was necessary. After that images and illustrations were made according to the need of the subject matter of the booklet. Each of the images of contraceptives has been placed in line with subject matter.
- **d. Formatting of written material:** Formatting of the subject matter, illustrations and images was done with necessary alignments and spacing of the document. It was that shaped as booklet.
- e. **Printing of Booklet:** Printing of booklet has been done after finalization of content in the form of booklet.

3.6.6.2.6 Preparation of Pamphlets

To sustain knowledge regarding various aspects of any topic and subtopic a pamphlet or leaflet can always be a better alternative. Keeping in mind this point, pamphlets has been prepared on various topics and subtopics. Content images and illustrations were used to prepare pamphlets on various topics and sub topics like, contraceptives, family planning methods, STDs / HIV etcetera.

3.6.6.2.7 Preparation of Self Learning Cards

Self-learning cards itself depicts that the cards for Self-Learning by the learner. Self-Learning cards on development of embryo were developed manually. Images related to the stages of development of an embryo were collected. Than it was drawn by an artist on the black sheet with the help of silver pen. The cards depicted the day wise and month wise development of an embryo.

3.6.6.3. Preparation of Educational Games

- **a.** Capturing Idea: An extensive review of various games available was done and idea was captured to plan the game on various topics and subtopics.
- b. Titling the Game:_Firstly, the thoughts were put on a piece of paper after conception of the idea of game planning and naming was done for each of the game. Two games were planned with having various topics and subtopics such as STDs & RTIs and Family Planning.
- **c.** Deciding the Rules and Regulations: The next step was to decide the rules, regulations and techniques to play the games. It was than explained to the participants to make them understand, *how to play*.

Two educational games were prepard namely "*nishana lagao*" and "*gaind ghumao, ank pao*". In "*nishana lagao*" game, participants have to hit the pyramid made of steel glasses. If they hit the aim, they were asked question related to reproductive health by the researcher. The participant has to answer them correctly to gain the winning points. Participants can have more chances to play if they answer correctly. In another game "gaind ghumao, ank pao" participants were asked to sit in a circle and had to pass a ball along with the music. The researcher played the music and stopped it randomly. The participant who was holding the ball were asked a question by researcher. She had to answer it correctly to gain the winning point. (**Refer Appendix 6.3 and 6.4**)

These have been selected, developed and implemented on the basis of their

- Cultural suitability and understanding
- Adaptability and sustainability of messages
- Convenience and feasibility of implementation in the local setting
- Availability of information and resource material
- Durability to retain with them for long time
- Easy to understand
- Easily available etcetera.

3.6.7 Validation and modification of IEC Materials:

A standardized uniform format was used to develop the entire IEC materials to maintain its understandability and functionality for the targeted group. The entire IEC materials were developed by using the uniform format with having clarified illustrations and language for the clear viewing and understanding at a glance by the individuals of target group. The IEC materials than validated and modified with having following criteria:

The kind and numbers of experts selected are given below:

Field of specialization	No. of Experts
Health Expert	1
Communication Expert	1
Film Making Expert	1
Language Expert	1

The IEC Materials were judged by the experts with some criteria's given below:

- Appropriateness with the topic
- Suitability to the target group
- Conceptual Clarity
- According to the Group or individual
- Material quality and quantity

After taking feedback and comments of experts on the developed IEC material necessary and appropriate corrections were done and modified for the final usage.

3.6.8 Communication Methods Adopted for Implementation of Package

Three methods of communication were adopted to impart knowledge among the respondents, shown in figure below:

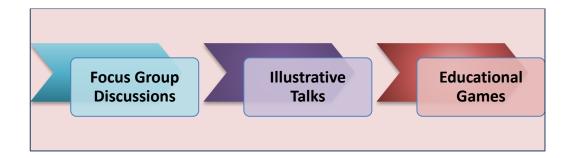


Figure 9: Methods Used for Imparting Knowledge

3.6.9 Pre-testing of IEC Package

After development of various IEC materials' covering all the selected aspects and sub aspects of Reproductive Health was pre-tested with tribal women (other than sample) of the selected area. Necessary changes have been made as per the requirements after pre-testing of materials developed.

3.6.10 Blue Print of Instruction Education and Communication Package

The complete blue print of the IEC Package developed Table 10 (Blue Print of IEC Package Developed and used for present study)

3.6.11 Preparing Programme Schedule

A Four months' programme schedule for implementation of package (**Refer Appendix 7**) was planned, keeping in mind the convenience of the respondents and according to pre-decided categories on every Reproductive Health aspect. The first month and last month were scheduled for the pre-test and post-test of the respondents, with two months in middle were planned exclusively for the intervention programme of developed package.

S. No.	Name of the topic	Sub topics	Methods	Media
1.	A. Stages of	 Puberty & Changes during adolescence Male and Female reproductive system 	• IT	PostersApron*
	Reproductive Health	 Menstruation and menstruation cycle 	• IT	Video filmPicture cardsPoster
		> Menopause	• IT	• Chart
2.	B. Maternal Care	 Process of reproduction Pregnancy symptoms and stages 	• IT	 Poster and Video* Posters and Power point Presentations
	Waternai Care	 Prenatal / Antenatal care Labor process 	• IT	 Flip book Poster Video*
		Postnatal / Postpartum care	• IT	Flash CardsPosters
3.	C. STDs and RTIs	 Types Causes and Symptoms Prevention and treatment 	Educational gameGroup discussionExpert Talk	 Power Point Presentations Flip Book* Pamphlets
4.	D. Family Planning	 Family Planning Methods and Contraceptives Its use, advantages and disadvantages 	ITEducational game	 Pamphlets Booklet Specimen Videos * and Video film*

Table 7: Blue Print of IEC Package (Reproductive Health aspects) developed and used for present study

*Denotes IEC Material Borrowed from Various Sources and not developed under the present study

This schedule included all the information about programme with each day's introductory module, with all the subtopics, sessions, time duration and methods etcetera (**Refer Appendix 7.1**).

3.7 Construction and Description of Research Tool

The interview schedule was developed by the investigator based on the literature review and expert's guidance. A discussion was also done with the elderly ladies of the selected area while developing the schedule to contextualize and make the interview schedule user-friendly and more understandable and feasible to implement. The schedule comprised of various sections, given in Table 11.

Sections		Specifications	Tools
Section – 1 Background Information	Part – A Part – B Part – C	Demographic information Socio – economic information Basic reproductive health	Checklist Cum Interview Schedule, Open Ended Questions
Section – 2 Reproductive	Part – A	information Practices related to personal hygiene	Checklist Cum Interview Schedule, Open Ended
Health Practices	Part – B Part – C	Food and diet related practices Practices related to maternal care (antenatal and postnatal)	Questions
Section – 3	Part - D $Part - E$ $Part - A$	Family planning practices Social and cultural practices Stages of reproductive health	For quantitative data:
Reproductive Health Aspects	Part $-$ B Part $-$ C	Maternal care STDs and RTIs	Interview Schedule for Knowledge test For Qualitative Data:
	Part – D	Family planning	Interview Schedule consisted Open Ended Questions
Section – 4 Reaction Scale	Part – A Part – B Part – C	Reaction scale for electronic media Reaction scale for print media Reaction scale for games	Scale with 3-4 point continuum

Table 8: Description of Research Tool (Interview Schedule)

3.7.1 Description of Research Tool

Section – 1 Background Information: This section consisted of three parts viz,

Part – A Demographic Information of the Respondents: This part of the first section consisted questions pertaining to demographic information like Age, Education and marital status of the respondents etcetera.

Part – B Socio – Economic Information: This part comprised questions related to economic information of the respondents.

Part – C Basic Reproductive Health Information: this part encompasses information related to the basic Reproductive Health of respondents. Given in table below:

Table 9: Description of Reproductive Health Information and its Measurements

Reproductive Health information	Measures
1. Age at marriage	Sequential age at time of marriage
2. Age at First Pregnancy	Sequential age at 1 st pregnancy
3. Length of marriage	Duration of marriage
4. Total number of pregnancies	Actual Number
5. Total number of children	Actual Number
6. Expired children	Actual Number
7. Reasons for expired children	Actual Reasons
8. Still births	Actual Number
9. Abortions	Actual Number
10. Reasons for induced abortions	Actual Reasons

Section – 2 Reproductive Health Practices: this section dealt with the information questions related to the practices prevalent amongst selected respondents towards various Reproductive Health Aspects i.e.

- **Part A Practices Related to Personal Hygiene:** in this part the questions related to personal hygiene during menstruation was framed.
- **Part B Food and Diet Related Practices:** This part included questions pertaining to the food habits of the participants, like how many times they eat while menstruating, which kind of food they consume during menstrual days etcetera.
- **Part C Practices Related to Maternal Care:** almost all the practices they follow during maternal condition (antenatal and postnatal care) of women were assessed by using questions in this section.
- **Part D Family Planning Practices:** whether respondents using/used any contraceptives? Than which, when and how they are using/used were measured with related framed questions in the Interview Schedule.

Part – E Social and Cultural Practices: which kind of social and cultural practices they are following were assessed with the help of developed interview schedule.

Section – 3 Interview Schedule for Assessment of Knowledge on Selected Reproductive Health Aspects: The interview schedule was developed; pretesting of interview schedule was done and used for the present study.

This interview schedule included structured, closed ended and open ended questions on various pre-decided and pre-selected reproductive health aspects, which are given as follows:-

- Part A. Stages of Reproductive Health of women
- Part B. Maternal care
- **Part C.** Sexually Transmitted Diseases/Reproductive Tract Infections
- **Part D.** Family planning

The Interview Schedule constituted of closed ended multiple choice questions. For the purpose of scoring, each correct answer was given 1 mark and each wrong answer/unanswered question was given 0 mark. **Quantitative Data:** Structured Interviews Schedule developed and used to collect data on Family Planning Methods.

Qualitative Data: Open ended questions have been included only on family planning aspects of Reproductive Health in the Developed Interview Schedule along with close ended questions. (**Refer Appendix 2**)

Section – 4 Reaction Scale for Various Media Developed: To check the efficacy of developed and collected media, a reaction scale was developed. This section consisted of three parts. Each section had different criteria to measure the reactions of the respondents towards various media. The measurement categories were viz. great extent, moderate extent and some extent.

Part – A Reaction Scale for Electronic Media: to measure the effectiveness of electronic media developed, a reaction scale was made with various aspects like General Aspects, Visual Aspects, Educational Aspects and Commentary. **Part – B Reaction Scale for Print Media:** There were various print media developed in relation to various aspects of Reproductive Health, to check the effectiveness of developed print media, a reaction scale pertaining to questions related to the various aspects covering educational, visual, commentary was developed and checked.

Part – C Reaction Scale for Games: This part of the fourth section focused on the questions related to reactions of the respondents towards effectiveness of the games planned for the participants.

3.7.2 Translation of Interview Schedule

After formation of detailed interview schedule, it was translated into Hindi language, which was the common language of the people residing in selected area. The conversation was made in local (Rajasthani) and Hindi both the languages, as the researcher was familiar with the language.

3.8 Validation of Research Tools

The research tool (interview schedule) than given to various experts from various fields to judge the accuracy of the research tool in terms of -

- Appropriateness of language
- Appropriateness of content
- Appropriateness of topic covered
- Appropriateness of response system and
- Validation

It was handed over to eight experts from various departments and faculties of The Maharaja Sayajirao University of Baroda, Vadodara and Gynecologist from a wellknown Hospitals of Vadodara City and Paratapgarh City. (**Refer Appendix 1.1**) Further necessary and required changes were made as per the suggestions specified by various experts and then the tool was finalized.

3.9 Reliability of Research Tool

After validation of research tool, reliability test for the tool was applied. The interview schedule administered to the 10 tribal women of the selected area with selected topics. After a significant gap of 15 days the interview schedule was again administered to the same tribal women. A test-retest method was used to calculate the reliability of the tool. The co-efficient of correlation was calculated between two sets of scores.

A high correlation was found with 0.87 Reliability Coefficient (r) between both the sets of scores, which revealed high reliability of the tool.

The formula used for test – retest method was as follows:

Calculating the Co-efficient of Corelation by Karl Pearson Method

$$\mathbf{N} \sum \mathbf{x} \mathbf{y} - (\sum \mathbf{x}) (\sum \mathbf{Y})$$
$$\mathbf{r} = \sqrt{[N \sum x^2 - (\sum x)^2][N \sum y^2 - (\sum y)^2]}$$

where:

Ν	= number of pairs of scores
∑xy	= sum of products of paired scores
$\sum \mathbf{x}$	= sum of x scores
$\sum \mathbf{y}$	= sum of y scores
$\sum x^2$	= sum of squared x scores
$\sum y^2$	= sum of squared y scores

3.10 Pre-testing of Research Tool

After the application of reliability test to the tool, it was then pre tested with 10 tribal women other than the sample. The major purpose of pre-testing of tool was to check the difficulty faced by the researcher in terms of language, time needed and the statements if any ambiguity found in that. The ambiguous statement found then modified and the language was corrected by the researcher for the further purpose. Regarding the scientific validation of the tool, the interview schedule developed by the investigator was given along with a requested letter to the panel experts. Necessary corrections were further made to finalize the Interview Schedule. After finalizing it was used to collect data on various selected aspects.

3.11 Procedure of Data Collection

For gathering information from the women respondents, first of all good rapport was established with the help of local leaders and informal discussions with the respondents were organized to inform them about the purpose of the intervention programme.

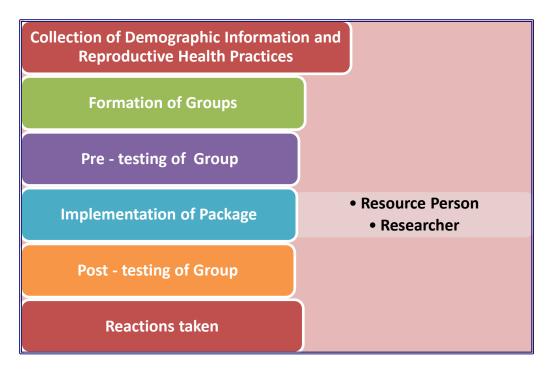


Figure 10: Procedure of Data Collection

Respondents were interviewed by using pre-developed structured interview schedule, by the investigator at their home/farm as per their convenience and availability. The local language was used. An informal atmosphere was created to help women to understand the questions more clearly and properly to give answers.

Firstly, background information and information reproductive health practices was collected with the help of developed interview schedule.

After those respondents were divided into three groups according to their residential area and rest of the data collection part was done in term of pre-test, implementation IEC Package and post-test of the respondents.

Lastly reactions of the respondents were taken on various IEC materials developed with the help of developed reaction scales.

Problems Faced by Researcher While Data Collection

- **1. Gathering of respondents:** The major problem faced by the researcher was collection of women at one place.
- 2. **Space problem:** Another major problem faced by the researcher was to find out the space to conduct educational programme. Researcher had to move from one

place to another to impart educational programme. As there was lack of facilities available in the village. Hence the educational programme was conducted on various places like Aanganwadi Centre, Residential Place of the respondents, In Veranda of the respondent's home, In the porch of school etcetera.

- **3. Transportation problem:** As it was discussed earlier, that the village was situated 3 KM interior from the main transportation road. Hence at the time of pre-testing and post testing there was lot of problem of transportation.
- **4. Time constraints:** As the respondents were moving for employment from one place to another place hence sometime they found less time to spend with the researcher.

3.12 Phases of The Experiment

The present study was conducted in three phases:

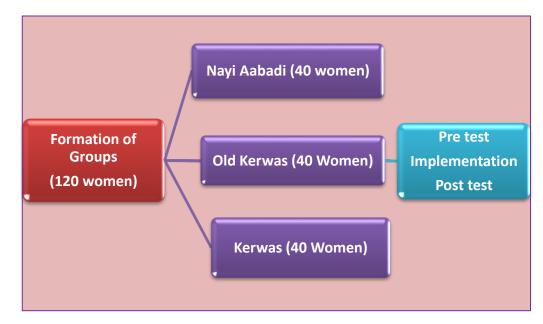


Figure 11: Phases of Experiment

3.12.1 Pre-test of Experimental Group: This was done prior to the implementation of the package so that baseline (existing) knowledge on Reproductive Health of participants can be judged and reported. A pre-developed and pre-tested structured Interview Schedule was used for this purpose. (**Refer appendix 2**)

- **3.12.2 Implementation of Package:** This phase involved the actual intervention of the developed and standardized reproductive health package comprising of carefully and methodically selected IEC materials. The intervention involved selected tribal women. A set of guidelines was taken into account for the implementation of the package. Participants were clearly and explicably informed about the intervention (what it's about, what's the purpose, time, duration and venue) prior to the actual implementation of the package and their due permission was taken much in advance. In order to take prior permission, to brief them about the intervention and to convince women to participate in the intervention, rapport building with them was critical. For this purpose, several informal meetings were organized with the help of local adolescent girls as well as with women.
- **3.12.3 Post-test of Experimental Group:** was done after the implementation of the complete IEC Package. This was done to check effectiveness of the package on the knowledge of adolescent girls and women on various facets of Reproductive Health.

3.13 Methods Used for Data Collection

This is important to choose appropriate methods to generate data from the selected target group. This can be deciding according to the characteristics of the sample drawn. Personal Interview method and experimental methods were used to collect data in the present investigation.

3.14 Scoring and Categorization of Data

The data on various aspects of the developed Interview Schedule were categorized and scores was assigned as depicted in Figure 15 and Table 14.

Section 1 Background Information

- Part A: Independent Variables
- Part B: Dependent Variables
- Part C: Other Background Information

Section 2 Reproductive Health Aspects

- Part A: Stages of Reproductive Health
- Part B: Maternal Care
- Part C: STDs and RTIs
- Part D: Family Planning



Section 1: Background Information

Part – A Independent Variables

In the present investigation four variables were taken that are listed in Table 13 along with the various categories:

- **1. Age:** In the present study age is operationalize as chronological age of the respondents at the time data collection for the study. Age was further divided in to categories, which is indicated in the Table 13.
- 2. Education of the respondents: Education implies various level of education perceived by the respondents. Educational status of human being always affects the knowledge and awareness of human being. In the present investigation educational status therefore taken as variable to see and check if this affects their knowledge and awareness or not.
- **3. Marital Status:** This variable is so far responsible for knowledge of women in relation to their reproductive health concern. This was categorized under various sections Table 13

S. No.	Variables	Categories
1.	Age	 Young (15 – 30 Years Middle (31 – 45 Years) Old (> 45 Years)
2.	Education	 Illiterate (Not literate) Primary (up to 5th Standard) Middle (6-8th Standard) Secondary (9-10th Standard) Higher Secondary (11-12th Standard) Graduate and Above
3.	Marital Status	 Unmarried Married Divorced Widow Living separately Living in kinship
4.	Monthly Family Income (in ₹)	 Low Income (1000-10000) Middle Income (10001 – 20000) High Income (>20000)

Table 10: Categorization of Independent Variables

4. Monthly Family Income: Family income was operationalized as the total earnings of the family in terms of money including farm and off-farm income per month which provides her the main source of livelihood and income for their family. It was measured by asking an open-ended question. This was ascertained by asking the respondents an open-ended question and coded as shown in Table 13.

Part – B Dependent Variables (Scoring and Categorization)

Table 14 shows aspects wise minimum and maximum possible score in selected Reproductive Health Aspects. Table contains number of items in each aspect and minimum and maximum possible score, which can be obtained by each of the respondents.

S. No.	Reproductive Health Aspects	Items	Minimum Score	Maximum Possible Score
1.	Stages of Reproductive Health	24	0	117
2.	Maternal Care	20	0	73
3.	STDs and RTIs	10	0	55
4.	Family Planning	9	0	36

Table 11: Aspects wise Minimum and Maximum Possible Score

Part – C Other Background Information

1. Family Size: This criterion was categorized as per number of family member living together viz, Small, Medium and Large as shown in Table 15

S. No.	Items	Categories	
1.	Family Size	 Small (2-4 Members) Medium (5-8 Members) Large (>8 Members) 	
2.	Type of House	 Kachcha Semi Pakka Pakka 	
	Ownership of House	 Own Rented Living in friends/ relatives house 	
3.	Landholding	 Landless (No Land) Marginal Farmer (Up to 5 <i>bigha</i>) Small Farmer (5.1 – 10 <i>bigha</i>) Medium Farmer (10.1 – 15 <i>bigha</i>) Large Farmer (>15 <i>bigha</i>) 	

Table 12: Categorization of other Background Information

- 2. Type and Ownership of House: This category gives idea and details about the possession of housing and its type.
- **3. Landholdings:** As respondents belonged to the agricultural background they were categorized as following type of farmers according to their landholdings.

3.15 Plan for Statistical Analysis: Data was analysed using 21 version of SPSS software

Sections	Sections Specifications		Statistical Measures Used	
Section – 1	Part – A	Demographic information	Frequency and Percentage	
Background	Part – B	Socio – economic information	Frequency and Percentage	
Information	I alt – D		Trequency and recentage	
	Part – C	Basic Reproductive Health	Frequency and Percentage	
		information		
Section – 2	Part – A	Practices related to personal hygiene	Frequency and Percentage	
Reproductive				
Health	Part – B	Food and diet related practices	Frequency and Percentage	
Practices	Part – C	Practices related to maternal care	Frequency and Percentage	
		(antenatal and postnatal)		
	Part – D	Family planning practices	Frequency and Percentage	
	Part – E	Social and cultural practices	Frequency and Percentage	
Section – 3	Part – A	Stages of reproductive health	Paired Sample t- test, ANOVA	
Reproductive				
Health	Part – B	Maternal care	Paired Sample t- test, ANOVA	
Aspects	Part – C	STDs and RTIs	Paired Sample t- test, ANOVA	
	Part – D	Family planning	Paired Sample t- test, ANOVA,	
			and conceptual discussion for	
			qualitative data	
Section – 4	Part – A	Reaction scale for electronic media	Frequency and Percentage	
Reaction				
Scale	Part – B	Reaction scale for print media	Frequency and Percentage	
	Part – C	Reaction scale for games	Frequency and Percentage	

Table 13: Measures Used for Statistical analysis