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A Study To Assess Knowledge Regarding Polycystic Ovarian Disease Among Adolscent Girls In The Selected Junior College In The Amravati"

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Abstract:-

Introduction:- It is a hormonal disorder that affects Adolescent Girls of reproductive age . polycystic ovary syndrome is the most common cause of infertility in AdolescentGirls,frequentlyseeninadolescence.primarilycharacterizedby ovulatorydysfunctionandhyperandrogenism.consequences–increasedrisk for metabolic syndrome , type 2 diabetes mellitus , cardiovascular disease and endometrial carcinoma Prevalenceofpcodinindia adolescentsis9.13%outof 10

Polycystic ovary disease is a health problem that affects 1in 10 Adolescent Girls of childbearing age.is a common health problem caused by an imbalance of reproductive hormones.[1]

Polycystic ovarian syndrome is the most common endocrine disorder in Adolescent Girls of reproductive age. The syndrome is named after cysts which forms on the ovaries of some Adolescent Girls with this condition , thoughthisisnotauniversalsymptoms,andnottheunderlyingcauseofthe disorder. TheprimarycharacteristicofPCODincludeshyperandrogenismanovulation

,insulinresistance,andneuroendocrinedisruption.AdolescentGirlsmayalso experienceirregularmenstrualperiods,excesshair,acne,pelvicpain ,difficultygettingpregnant,andpatchesofdarkerskin.

AreviewofinternationalevidencefoundthattheprevalenceofPCODcould beashighas26%amongsomepopulations,thoughrangesbetween4%and 8%arereportedforgeneralpopulations.Accordingtotheworldhealth

BACKGROUNDOFTHESTUDY

PCOD [polycystic ovarian disease] an endocrine disorder, which means normal hormones cycles are interrupted. The syndrome was originally reported by stein and Leventhal in 1935 when they described a groupof Adolescent Girlswith amenorrhea , infertility, hirsuitism and enlarged polycysticovaries.Polycysticaretwotofivetimeslargerthannormalovaries .Adolescent Girlsare usually diagnosed when in their 20's or 30's. this can contributetoinfertility.possiblecomplicationsaresterility,obesity,related conditionlikehighbloodpressureanddiabetes,increasedriskofendometrial cancer, possible increased risk of breast cancer.[3]

Arecentstudyrevealedthatabout18%ofAdolescentGirlsinindia,mostly from the east , suffer from polycystic ovarian disease . a disorder which causes infertility among Adolscent girl.

Polycystic ovarian disease is a prevalent endocrine disorder in Adolescent Girlsand the leading cause of infertility.

TheincreasingtendofPCODispredominantlyseeninthechildbearingage groups of 15 to 30 years.[4]

Early diagnosis and treatment can help control the symptoms and prevent health related problems .

NEEDFORTHE STUDY

Polycystic ovarian disease is the most common reproductive endocrinological disorders with a broad spectrum of clinical manifestation affecting about 6-8% of Adolescent Girlsof reproductive years.[5]

The European society of human reproduction and embryology / American societyforreproductivemedicinecriteria,oftencalledRotterdam,includes various phenotypes based on a combination of any two of the three findings of hyper- androgenism , menstrual irregularity, and polycystic ovaries and ultrasound.[6]

PCOD remains a disease and as such , no single diagnostic feature is sufficientinitselftoestablishtheclinicdiagnosis.similarly,PCODmustbe ruled out ; such as congenital adrenal hyperplasia , cushing syndrome.[7]

The exact prevalence of PCOD is not known as the disease is not defined precisely and depends on the choice of diagnostic criteria. World health organization [WHO] estimated that it affected 116 million Adolescent Girlsworldwide in 2012 [3.4% of Adolescent Girls] globally ,prevalence estimates of PCODare highly variable , ranging from 2.2 % to as high as 26%.[8]

In india , the prevalence is gradually increasing. In Indian express in 2013 , it was published that PCOD becoming 'epidemic'in banglore city, because of the lifestyle that people have adopted.

Planned teaching method is used as a tool to evaluate the knowledge of adolescentGirlssregardingpolycysticovariandisease.itisalearning package system consists of planned and prepared instruction from the beginning till end with an aim to facilitate self learning.[9]

Observation made by the researcher during their experience, majority of the adolescent Girlss does not have proper knowledge regarding polycystic ovarian disease . the researcher felt there is need to educated the adolescent Girlssaboutthepolycysticovariandisease.Soresearcherinterestedtoselect this topic for the study. [9]

STATEMENTOFTHEPROBLEM

A Study to assess the Knowledge of PCOD among Adolescent Girls in selected Junior college of Amravati city

RESEARCHQUESTION

StudytoassesstheKnowledgeofPCODamongAdolescentGirlsresidingin selected Junior college of Amravati city

OBJECTIVES:

Afterformulatingtheresearchquestion,theinvestigatorhasframedprimary and secondary objectives in such a way that, each variable in the objectives are amenable to empirical enquiry. The objectives are –

1. PRIMARYOBJECTIVE

To assess the knowledge regarding PCOD amongAdolescent Girls residing in Junior college of Amravati city

2. SECONDARYOBJECTIVE

To find out the association between the knowledge of PCOD and demographic variables of Adolscent girl.

OPERATIONALDEFINITIONS

Theconceptsofresearchquestionwillbeoperationallydefinedunderfollowing variables in order to make accurate statistical measurements-

- **Assess:**referstostatisticalmeasurementofknowledgeusingstructured

interview schedule (SIS) on PCOD amongAdolescent Girls in selected Junior college of Amravati city

- **Knowledge:**referstooperationalizedasverbalresponsesofAdolescent

GirlstotheknowledgeitemsinSISonPCODforthepurposeofanalysis, theknowledgedividedas verypoor,poor, average, good,andverygood

PCOD:

A medical condition in which the Adolscent girl ovaries produce immature or partially mature eggs in large numbers and over the time these become cyst in ovaries.

SCOPE OFTHE STUDY

- Help to understand the level of knowledge on PCOD amongAdolescent Girls of reproductive age.
- HelptounderstandtheimportanceofPCOD,tourbanAdolscentgirl.

- Tosavethelifeofpatientsbytheuseofmenstrualbloodstemcell.

- To educate and aware the urbanAdolescent Girls related to how PCOD are important.
- ResultofthisstudymaybeusefulforthePCODamongAdolescentGirls of reproductive age.
- Theresultofthisstudymaybeusefulforconsumers,researchscholars, and could be a recommendation for future research studies.

Result ofthisstudymaybeusefultoknowtheknowledgeofAdolescent Girls regarding PCOD .

HYPOTHESIS/ASSUMPTIONS:-

ASSUMPTION:

TheremaybeknowledgeregardingPCODamongAdolescentGirls in Junior college of Amravati city
Theremay beassociation between knowledgescoreon PCOD withselected demographic variable of Adolescent Girls

Hypothesis: Aresearch scholarhas formulated following hypothesis to find relationship between variables of research question.
H1:ThereisaknowledgeregardingPCODamongAdolescentGirlsinJunior college of Amravati city
H2:ThereisaassociationbetweenknowledgescoreonPCODwithselected demographic variable of Girls.

DELIMITATIONS:-

Thestudywasdelimited to-

- 150AdolescentGirlsinjuniorcollegeinAmravaticity
- AdolescentGirlsofreproductiveagegroup,inJuniorcollegeof Amravati city
- AssessmentofknowledgeofPCOD

CONCEPTUALFRAMEWORK

InthisstudyResearcherusedthePender'shealthpromotionmodel(1996)as the framework for assessing the knowledge of PCOD in Junior college of Amravati city

The health promotion model describes the multidimensional nature of personsastheyinteractwithintheirenvironmenttopursuehealth.Itfocuses on cognitive, perceptual and modifying factor and participation in health promotion behaviour. The model also identifies factors that influence the health promotion activities and behavioural.

The model also identifies factors that influence the health promotion activities and behavioural outcome.
MODIFYINGFACTORPERCEIVEDSUSCEPTIBILITY

Inthepresentstudy,themodifyingfactorreferstodemographicvariablesuch as age, qualification, religion, occupation and family income.

COGNITIVEPERCEPTUALFACTOR

In the present study, the cognitive factors refer to assessment of knowledge onPCODamongAdolescentGirlsresidinginJuniorcollegeofAmravaticity **Behavioural factor**

In the present study, the behavioural factors refer to specific cognition and affect, perceived benefits of action, perceived barrier to action, perceived self-efficiency, activity related effect, commitment to plan of action and immediate Competing demanded and preferences. For the present study behavioural factors are likelihood of engaging in service of PCOD.

OUTPUT

Inthisstudyoutputreferstothefindingofthestudyaimedatthe Adolescent Girls knowledge on PCOD.

BEHAVIOURALFACTOR

In the present study, the behavioural factors refer to specific cognition and affect,perceivedbenefitsofaction,perceivedbarriertoaction,perceivedself efficiency, activity related effect, commitment to plan of action and immediate Competing demanded and preferences.

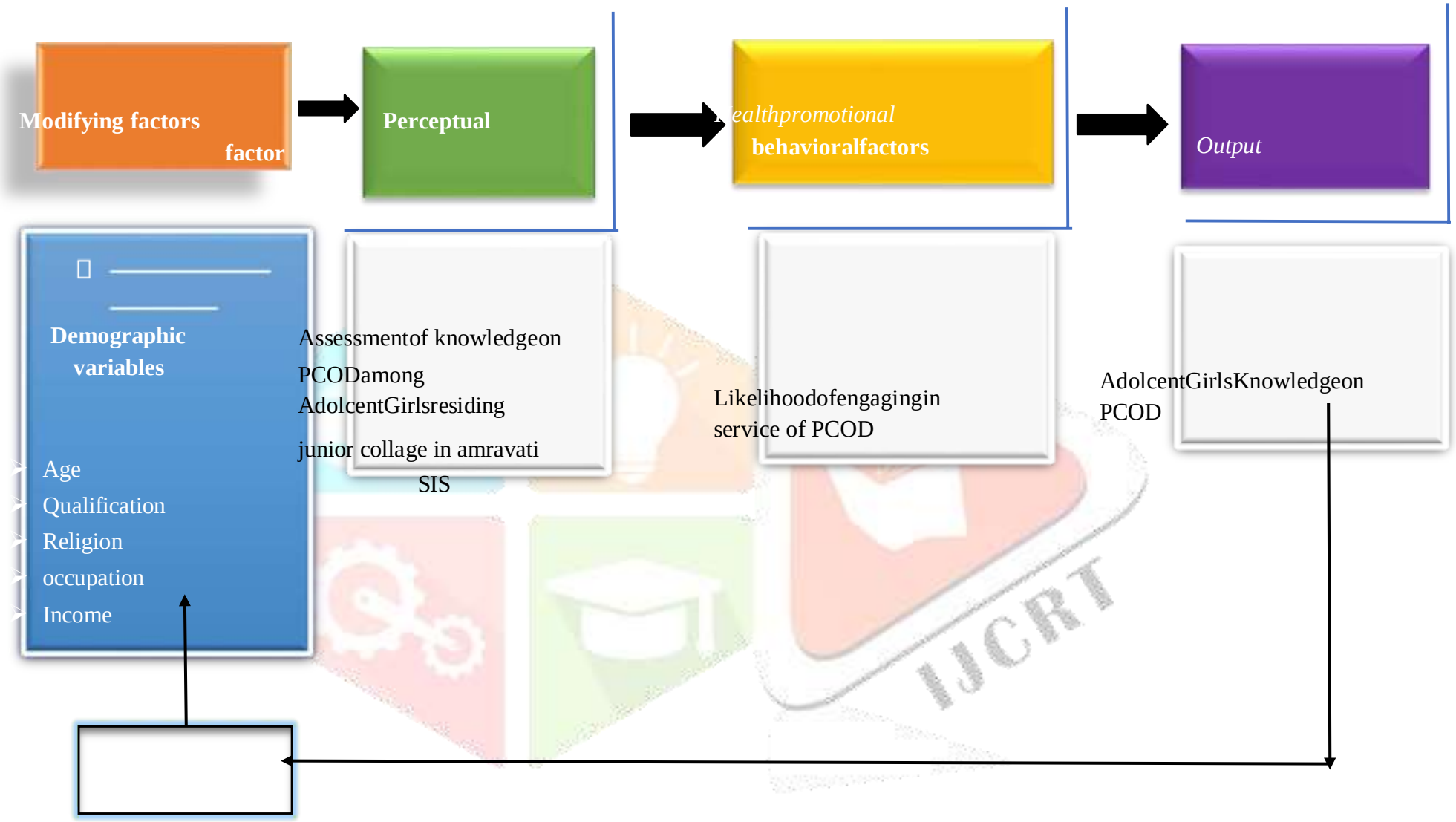
PERCEIVEBARRIERS

Perceive barriers are most significant to changing behaviour's. The barriers like financial resources, lack of transportation, child care needs, as well as fear of pain, embarrassment and inconvenient. TheAdolescent Girls should adapt new behaviours for overcome to barriers.

OUTPUT

Inthisstudyoutputreferstothefindingofthestudyaimedatthe Adolescent Girls knowledge on PCOD

Apreliminaryreviewis carried out on recent and updated literaturerelevant on the study.The research scholar has categorized collected literature under following heads:



ConceptualFrameworkbasedonmodifiedPender'sHealthpromotion (1996)

Chapter-2

REVIEWOF LITERATURE

Reviewingtheliteratureisimportanttogainabetterunderstandingandinsight necessarytodevelopabroadconceptualframeworkwithinwhichtheproblem can be examined.[10]

Written literature reviews arethe critical summaries ofwhat is known about a particular topic. The reviews serves as an integrative function and facilitates the accumulation of knowledge. Hence review of literature is important to aresearch in order to know what has been established and documented. 10 Polycysticovariansyndromeisanendocrinedisorderwhichaffectstheadolescent girls. It has been foundthrough studiesthat it affects around5% to 10%ofAdolscentgirl in theirreproductiveyears.Thestudywas conducted to assess the knowledge on the polycystic ovarian syndrome among the student nurses. The data was collected from the nursing students by using structured questionnaire. The data collected from 150 samples in Nitte Usha Institute of NursingSciences.Descriptivesurveyresearchapproachwasadoptedanddata wasanalysedbyusingdescriptiveandinferentialstatistics.Distributionofthe samplesondemographiccharacteristicsrevealedthat85%ofthesampleswere in the age group of 21-25years, 75% of the samples were Christians, 82% of thesampleswereconsumingmixeddiet,and92%sampleshadregular menstrualcycle.76%ofthesampleswerewithaverageknowledgeand10.7% withgoodknowledgeregardingpolycysticovariansyndrome.Hencethestudy concludedthatSourceofinformation,consumptionofjunkfood,dietary patternsofthestudentswereassociatedwiththeirlevelofknowledgeonPCOS at 5% level of significance.[11]

Astudy was done to assess the effectiveness of planned teaching programme (PTP) om polycystic ovarian syndrome (PCOS) among adolescent girls in selected high schools am Mangalore.

Themain objectivesof thestudy were

1. Toassessthepre-testlevelofknowledgeregardingPCOSamongadolescent girls in Selected high schools at Mangalore.
2. ToevaluatetheeffectivenessofPlannedTeachingProgrammeonknowledge regardingpolycysticovariansyndromeamongadolescentgirlsinselectedhigh schools at Mangalore.
3. To find the association between the pre-test knowledge score of adolescent girls and selected variables.

An evaluator approach with pre-experimental one group pre-test post-test design wasusedforthestudy.Thesubjects were100adolescent girls selected by convenience sampling technique.

PTP was administered after the assessment of pre-intervention knowledge on PCOS. Post intervention knowledge was assessed on the 7th day of the administration of PTP through the same structured knowledge questionnaire. The results of this study in general showed, the significant difference between the mean pre-test and post-test knowledge score (t₉₉ =7.02, p<0.05). The significant difference was found in betweenallthe areas.Therewasnoassociationbetweenthepre-testknowledge scoreandselecteddemographicvariables.HenceitcanbeconcludedthatPTP was effective in gaining knowledge of adolescent girls on PCOS. which was evident in post-test knowledge score.

A descriptive study was conducted to describe patient perception and awarenessofPCOS.About657Adolscentgirlofagegroupof26-34yearswere includedinthestudy.Aquestionnairewasusedandstudyrevealedthatpatients'emotionsassociatedwithdiagnosisofPCOSincludefrustration(67%),anxiety (16%), sadness (10%), and indifference (2%). Therefore awareness regarding PCOS can be achieved through wide public service.[12]

Astudywasconductedamongobesegirlsbetween12to18years,to analysed the impact of lifestyle intervention on menses irregularities, hyperandrogenaemia, and Intiman-media thickness (IMT) in adolescent girls withPCOSinGermany(2011)Studyincluded59obesegirls.Interventionwas a1-

yrlifestylemodificationbasedonnutritioneducationandexercisetraining.
Thestudyfoundthatweightlossduetolifestyleinterventioniseffectivetotreat menses irregularities, normalize androgens, and improve intima-media thickness (IMT) in obese adolescent girls with PCOD.[13]
Acase control study was done among adolescent girls to find out "Polycystic ovarysyndrome(PCOS)inurbanarea"inDelhi(2011).Atotalof65(33PCOS, 32 control) were selected for the study. A semi-structured questionnaire was administered to collect data. The study found that obesity is major risk factor in developing PCOD in adolescent girls.[14]

A cohort study was conducted among adolescent girls to study the clinical outcomeofmenstrualirregularity,afteragap of2 yearsinKerala(2011).The sampleconsistedof136girls.Presentmenstrualhistoryandsymptomsaswell assignsofpolycysticovarysyndrome(PCOS)wererecorded.Aftertwoyears, of the 136 cases reported, 36.0% cases were found to have PCOS and 63.9% cases were normal. The results of this study support screening for menstrual irregularity,obesityandsignsofclinicalhyperandrogenismforcarlydiagnosis of PCOS is an effort to improve the reproductive health of adolescent girls
Astudywasconducted amongoligohypomenorrheapatientsto investigate the prevalence of PCOD with hirsutism in Lahore (2010).Study consisted of 90 cligible couples and they were divided into two groups. Group- 1,Oligomenorrhea with hirsutism and group -2, oligomenorrhea without hirsutism.A questionnaire was used to collect data. The result showed that prevalence of PCOD are higher among patients having both oligohypomenorrhea and hirsutism.[15]
polycystic ovary syndrome (PCOS) in Newyork(2009).Adolescent girls, with aprimaryICD-9diagnosisofovariandysfunction(256),menstrualirregularity (626),orhirsutism(704.1)wererandomlyselectedforevaluation.Twenty-five percent (15/60) of the patients were evaluated for PCOS according to the Rotterdam Criteria, and only 2 were evaluated for common co-morbidities associatedwithPCOS.Ofthe28patientswhopresentedwithtwoormoresigns ofPCOS(menstrualirregularitypluseitherobesity,hirsutismand/oracne),15 wereevaluatedforPCOS(54%),butonly7%wereassessedforcommonco morbidities.ThesefindingssuggestthatPCOSisunderevaluatedandpossibly under diagnose population, which raises serious concerns regarding the potential for major long term public health consequenceS.[16]
A study was conducted among adolescent girls regarding early detection of Polycysticovarysyndromein California(2007).255girls wereselectedfor the study. A Structured questionnaire was used to gather data. The study found abnormal activation of the hypothalamic-pituitary-ovarian-adrenal axis is accompanied by specific morphologic changes of the ovary. Efforts to minimize the clinical features of PCOS in young adolescent girls depend on carly diagnosis and timely suppression of excess ovarian androgen production.[17]

Acrosssectionalstudywasconductedamongurbanadolescentgirlstofindout prevalence of PCOD in Mumbai (2008) Sample consisted 300 college going adolescents.Questionnairewasadministeredtocollectdata.Biochemicaltests and ultrasonography was done.The study found that the prevalence of PCOD is 6.5-8%2.[18]

Across sectional study was conducted amongAdolscent girl between the age group of 15- 39years, to assess the community prevalence and phenotype of polycystic ovary syndrome in Srilanka (2006).3,030 Adolscent girl were selected by cluster sampling.Aquestionnaire was administered to gather data regardingmenstrualhistoryandclinicalmanifestationsofhyperandrogenism.

91.2 percentAdolscent girl with oligo amenorrhea in the presence or absence of hyperandrogenism and 87.5 percent with hirsutism alone with regular menstrual cycles had PCOS. The study found that most common phenotypes of PCOS were oligoamenorrhea 91.4%) and and hirsutism (48.3%) 24

Astudy was conducted among adolescent girls regarding PCOD and changes in dietaryintakeinAmerica(2006).250samples wereincludedin thestudy.A questionnaire was used for collecting data regarding diet and exercises. The studyfoundthatoverhalfof theAdolscent girlwhoarediagnosedwithPCOS are overweight or obese. Adolscent girl should adopt diet, which includes an increasein fibreand adecreasein refined carbohydrates,as well as adecrease intransandsaturatedfatsandanincreaseinw-3andu-9fattyacids.Thestudy found thatfoods that contain anti-inflammatory compounds (fiber, w-3 fatty acids, vitamin E, and red wine) should also be emphasized.[19]

Acase-controlstudywasconductedwith34adolescentsduringtheperiodof2 to4yearsaftermenarchetoassessthepresenceofinsulinresistanceaswellas the incidence of polycystic ovary syndrome (PCOS) in adolescents with menstrual disorders. The patients were divided into two groups: Group I (GI) with22patientswithmenstrualirregularity,andGroupII(GII)with12patients withregularmenstrualcycles.Bodymassindex andFerriman- Gallwayindex were calculated for all patients, who also received a pelvic ultrasound. It measuredDHEA-S,17hydroxyprogesterone,testosterone,TSH,LH,FSH,and prolactininserumsampleandconductedtheglucosetolerancetestwith75mg dextrosewithmeasurementofglucoseandinsulin.Theresultshowedthat mean

± SD ovary volume was larger in GI (11.38 plus/minus 4.06 * cm * 3) than in GII(7.72plus/minus5.59*cm*3)P<0.05DHEA-S(1=47.23GII-38.38 µg/dl)andtestosterone(GI-54.19;GII=32.53ng/d*l)levelswerehigherin patients with menstrual irregularity.[21] In G I it detected two patients with diabetes mellitus and one patient with glucose intolerance. Sixteen patients in this group had clinical or hormonal characteristics of PCOS.The mean values of the area under the insulin curve (AUIC) were higher in patients with menstrual irregularities (8, 556.52mu*lU / m * l / 2 * b) than in controls (5, 743.38mu*IU / m * L/ 2 1 ; P<0.05).The presence of PCOS was detected in 95% of the adolescents with menstrual irregularity. Patients with menstrual disorders presented higher AUIC values than controls[22]

Across-sectionalstudytodeterminetheprevalenceof clinicalPCOSin14-18 yearsoldhighschoolgirlsinIsfahan,Iran.1000highschoolgirls(14-18years old) were selected by multistage random sampling from different high school in Isfahan. Following physical examination, a single physician recordedtheprevalenceofhirsutism,severeacne,androgenicalopecia,menstrual dysfunction and obesity using a validated questionnaire method.[23] The result The result showed that clinical PCOS was present in 30 (3%) hirsutism in 60 (6%), menstrual dysfunction 74 (7.4%) and severe acne in 47 (4.7%) of thepopulationstudied. Thestudyconcludedthattheprevalenceoftheclinical PC4OS in the study population was similar to those of other studies Acomparativestudywasperformedtocompareclinicalandendocrinefeatures and ultrasonographic data of adolescent ($ 18 years old) and adult (≥ 19 years old) patients with ultrasound-diagnosed polycystic ovaries (PCOs) in a ReproductiveEndocrinology outpatient clinicin ZekaiTahirBurakAdolscent girl's Hospital, Ankara, Turkey.[24] The adolescent group included 35 PCO patients while 125 were in the adult group randomly selected during the same period. Hirsutism was present in 64.7% of the adolescent group and in 49.6% of the adult group.[25]Menstrual irregularities were detected as oligomenorrhea (42.8%), amenorrhea (20%) and irregular but normal cycles (17.4%) in the adolescent group, the figures for the adult group were 46.4, 8.8 and 23.2%, respectively. The mean body mass index of the adult PCO group was significantly higher than the adolescent PCO group (p<0.05).[26] This study conclude that polycystic ovarian syndrome is a disorder with premenarchal onset,theclinical,endocrineandultrasound featuresofwhichwillnotchange by age, although patients are prone to gain weight as they get older.[27]

CHAPTERIII

RESEARCHMETHODOLOGY

The methodology of this study includes research approach and design, setting, sampling, tool construction, testing of tools, pilot study, methods of data collection, and a plan for data analysis.

RESEARCHAPPROACH

Aquantitativeresearch approach wasused toassessknowledgeon PCOD among Adolescent Girls in Junior college of Amravati city

RESEARCHDESIGN-Adescriptiveresearchdesignwasusedtoassess the knowledge on PCOD among Adolescent Girls in Junior college of Amravati city

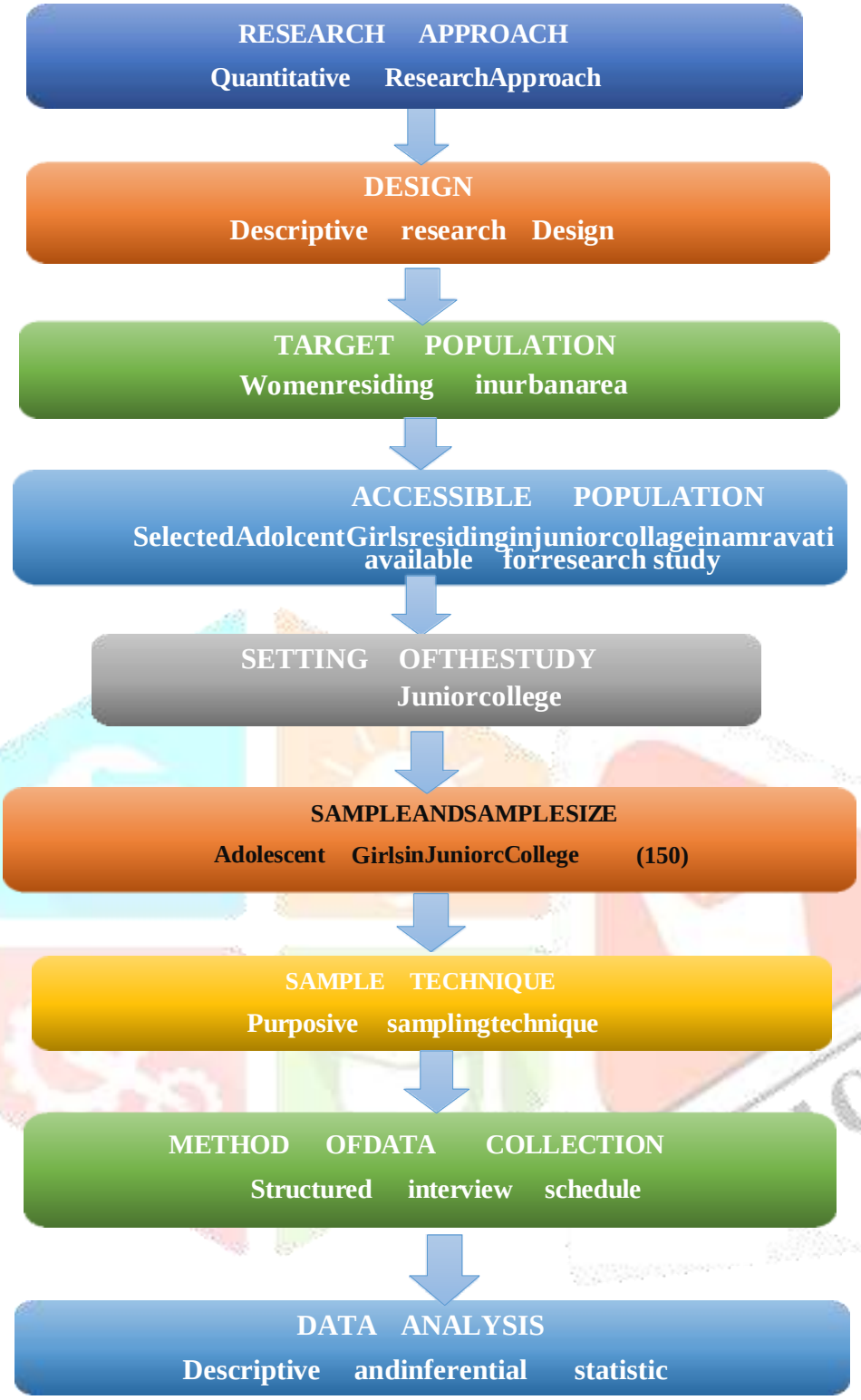


Figure-2:SCHEMATICPRESENTAIONOFRESEARCHDESIGN3.1

VARIABLES

Dependentvariable:theknowledgeofAdolescentGirlsresidinginjuniorcollegein Amravati city was considered as the dependent variable under this present study.

Independent variable: In the present study**,** polycystic ovarian disease (PCOD) was considered as independent variable.

Demographicvariables:(researchvariables)inthepresentstudy,theagein years, education, type of diet, family income, and religion

SETTINGOFTHE STUDY.

The study was conducted in selected junior college in Amravati city at Vidarbharegion,Maharashtra.Theselectionofsettingwasconsideredon the basis of the feasibility of data collection procedure, availability of samples and geographical proximity.

The investigator visited to junior college inAmravati city and there were under 1 junior college in Amravati city has been selected for the data collection.ThetotalpopulationinthisjuniorcollegeinAmravaticitywas 343 and as per the record 225Adolescent Girls residing in junior college inAmravati city and there were 150Adolescent Girls are available at the time of data collection, and 150 Adolescent Girls selected for data collection.

POPULATION

TARGETPOPULATION

AdolescentGirlswhomstudyfindingsaregeneralizedwillbethetargetpopulation.

ACCESSIBLEPOPULATION

AdolescentGirlswhomwill betheavailableatthetimeofdata collection.

SAMPLING

SAMPLE

AdolescentGirlsresidinginselectedjuniorcollegewillbethesamplesfor proposed study.

SAMPLESIZE

Sample size was 150. However, it was calculated based on sample size determination formula i.e.; n = N (1+Ne2) N= refers to total number of Adolescent Girls=237
e=allowedmarginoferrorupto5%confidenceinterval=0.05 n= sample size required n = N (1+Ne2) i.e n = 237 (1+ 237 x 0.052) n = 237 (1+ 237 x 0.n = 237 (1 + 0.59)

n=237/1.59 n = 149.05 **n = 150**

SAMPLINGTECHNIQUE

The purposive sampling technique was used to select the Adolescent Girls residinginjuniorcollegeinAmravaticityofVidarbharegion,Maharashtra. The total population of selected junior college in Amravati city was 343 where there were 225Adolescent Girls of reproductive age group and 150 are available at the time of data collection. Out of available Adolescentgirl, the investigator has selected 150 sample for data collection.

CRITERIAFORSAMPLE SELECTION

Inclusioncriteria

- AdolescentGirlswhowillgiveconsentedtoparticipateinthestudy.
- ThoseAdolescentGirls areavailableatthetimeofdata collection.
- AdolescentGirlswhounderstand Marathi

Exclusioncriteria

AdolescentGirlswhoarementallyillandincompetent. Adolescent Girls those who do not understand Marathi

Development / construction of tool

Thetoolconstructionwasbasedonstudyobjectivesandconceptualframe work. However, the investigator has adopted following steps prior to developmentofsoundinstrument/toolfordatacollectionfromAdolescent Girls residing in Junior college of Amravati city

- Thereviewfromvariousresourceslikebooks,journals,periodical, magazines and other printed materials based on objectives and hypothesis of research question.
- Consultationanddiscussionwithexpertsfromnursing, research and biostatistics
- Preparation of blueprint after such deliberation, tool was prepared for data collection.

DESCRIPTIONOFTOOL

STRUCTUREDINTERVIEWSCHEDULE

The SIS was designed to assess the knowledge of PCOD among Adolescent Girls residing in Junior college of Amravati city This instrumentwasusedbytheinvestigatorhimself/herselfbeforeandafteran intervention within a stipulated time period. However, the SIS contains; Part A and Part B

Part:A–seekinformationondemographicvariablesofAdolescentGirlsresiding

injuniorcollegeinAmravaticitysuchasAgeinyears,education,religion,typeof diet, family income.

PART:B-Thestructuredquestion/statementthatseekinformation on

PCODamongAdolescentGirlsresidinginJuniorcollegeofAmravaticity Itshallbeintheformof Multiple-ChoiceQuestions(MCQs)thatcontain a total of 30 questions with a total score of 30.
Theitemareintheformof multiple-choice question.

The score for each right answer was 1 score and for wrong answer zero score. For the purpose of analysis, however, the knowledge score were divided in to grades.

TABLENO.3.2BLUEPRINTOF SIS

Sr. No.	Areaof knowledge	No. of Questions	Percentage
1.	Generalinformationon PCOD	08	26.6%
2.	CauseOfPCOD	08	26.6%
3.	Importanceof PCOD	05	11.8%
4.	Sign and symptomsofPCOD	05	11.8%
5.	ManagementofPCOD	06	20%
	Total	**30**	**100%**

Itisconsistingofquestionsleadingwithaseriesoffouranswer,regarding knowledgeonPCOD.Hence,youarerequestedtoreplyappropriatelyand put a tick mark (√) in a column of option that best corresponds with how you feel about the questions asked.
The allotted time is of 30 min to complete all the questions. It is assured that your information will be kept confidential.

ScoringofSIS:

Tableno.3.3scoringofSIS

Knowledge	Percentage	Score
Verygood	81%-100%	25 -30
Good	61%-80%	19 – 24
Average	41%-60%	13 – 18

Poor	21%-50%	07 -12
Verypoor	20%&below	06 &below

TESTINGOFTOOLS

ValidityofSIS

Content validity of SIS was established in consultation with 10 experts from the field of obstetrics and gynaecological nursing (n=7), gynaecologist (n=1), statistician (n=1), language expert (n=1). The suggestion subject experts were taken into consideration and reform the same.

VALIDITYOFTOOLSWEREDETERMINEDASFOLLOWS–

1. Prepared tools along with objectives, hypothesis, operational definitions, blue print, & criteria were given to the experts and
requested them to give valuable opinion / suggestion regarding relevance andappropriateness of the contents.
2. Experts were asked to put tick mark (√) on corresponding item. The remarks against each item were categorized as relevant, needs modification, and not relevant.
3. The experts were requested to give brief description on any specific content / subject; if necessary.

TRANSLATIONOFTOOL

Validated SIS on PCOD were translated Marathi version and again re- translated to English by a language expert to check the correctness of validated tool before implementation amongAdolescent Girls residing in Junior college of Amravati city

RELIABILITYOFSIS

Datawascollectedfrom15AdolescentGirlswhowereresidinginselected junior college in Amravati city to test reliability of SIS. The split-half methodwasusedwherethetoolwasdividedintotwopartsthescorefrom both parts are correlated. The questioner is said to be reliable if the coefficient is more than 0.8 .Karl Pearson's correlation coefficient was calculatedandtheSISwasfoundtobereliableatr=0.93.Hence,SISwas considered a reliable.

PILOT STUDY

The Pilot study was conducted among 15 Adolescent Girls residing in urbanarea,tofindoutthestudyfeasibilityofthestudy.Writtenpermission wasobtainedfromconcernauthorizedanddatawascollectedonDecember 2023. Collected data were coded, tabulated, analysed by using descriptivestudy andinferentialstatistics.

Findingofpilotstudyhavethefeasibilityofmajorstudy;however,itwas helped the investigator to visualized some of the practical issue/ problem during the study and given better insight to the data collection procedure.

METHODS FOR DATA COLLECTION RELEVANT TO OBJECTIVES

ETHICAL CONSIDERATION

Institutional ethical committee (IEC) permission will be obtained for the proposed study.

LEGALCONSIDERATION

the investigator has obtained formal permission from the concerned authorities ofselected junior college inAmravati city to collect data from Adolescent Girls residing in Junior college of Amravati city

INFORMEDCONSENT

AninformedconsentshallbeobtainedfromeachAdolescentGirlswithanassurance of confidentiality and anonymity.

Datacollectionprocedure

The investigator himself/herself wills collects data from patients after fixing time and date from concerned authorities Data collection in consultation with urban Adolescent girl. According to pre- planned date andtime,theinvestigatorhasvisitedthejuniorcollegeinAmravaticity anddatawascollected at theirhomesetting,from08-01-24to20-02-24.

Initially,theinvestigatorhasvisitedtheselectedjuniorcollegeinAmravati city and interviewed 150 Adolescent Girls using demographic data.And theywererequestedtorespondtothequestiononebyone,andinvestigator put (√) mark on right option mention below of each question related to demographicvariable.Thedoubtswereclarifiedandcollectedthefieldin tool after 30 minutes. After the data gathering process, the researcher thanked the entire study sample as well as the authorities for their cooperation.

DATE	TIME	NO OF ADOLESCENT GIRLS	SETTING
08/01/24	9am-5	10	
09/01/24	9-5	07	
10/01/24	9-5	12	
11/01/24	9-5	8	
12/01/24	9-5	7	
13/01/24	9-5	13	Junior college inamravaticity
14/01/24	9-5	9	
15/01/24	9-5	18	

16/01/24	9-5	15	Maharashtra
17/01/2	9-5	11	
18/01/24	9-5	16	
19/01/24	9-5	15	
20/01/24	9-5	9	

PLANFORSTATISTICALANALYSIS

Descriptive and inferential statistics will be used for data analysis. The collected data will be organized, tabulated and analysed by using descriptive statistics such as; percentage, mean and standard deviation. And,theinferentialstatisticssuchas;chi–squaretestandpairedt'testwill beusedtotestthehypothesiswithSPSSsoftwarethestudyfindingwillbe presented in the form of tables, diagram and figures. The inferential statistics includeANOVA. The collected data were plan to analyse under following headings-

SECTION-I: DistributionofAdolescentGirlsresidinginjuniorcollegein Amravati city according to their demographic variables.

SECTION – II: Assessment of the knowledge ofAdolescent Girls residing in Junior college of Amravati city

SECTION–III: AssociationbetweenknowledgeonPCODof Adolescent Girls with their demographic variable.

SUMMARY

This chapter dealt with research approach, design, population, setting of the study, sample and sampling technique, tool preparation, validity and reliability ofthetool,pilot study,andmethodsofdatacollectionandplan for data analysis.

CHAPTERIV

ANALYSISANDINTERPRETATION

This chapter deals with analysis and interpretation of the data collected from 150 samples who were Adolescent Girls from Junior college of Amravati cityThe SIS was used in group to collect data fromAdolescent Girls with reproductive age group for analysis and interpretation. Further analyseddatawereorganizedinaccordancewithobjectivesandhypothesis of research question

THEOBJECTIVESOFRESEARCHQUESTION.

1. To assess the knowledge on PCOD ofAdolescent Girls residing in selected junior college Amravati

city

2. TofindtheassociationbetweenknowledgeofPCODanddemographic variables.

THEHYPOTHESISOFTHESTUDYWAS-

H1:Thereisanassociationbetweenknowledgescoreon PCODwithdemographic variables.

- **Section I:** Distribution of Adolescent Girls residing in junior college in Amravati city with regards to demographic variables.
- **Section II:** Assessment of level of knowledge on PCOD among Adolescent Girls residing in Junior college of Amravati city
- **Section III:** Association of knowledge on PCOD among Adolescent Girls residing in junior college inAmravati city with their selected demographic variables.

SECTION-I:DistributionofAdolescentGirlsresidinginjuniorcollegein Amravati city according to their demographic variables.

4.1.2PercentagewisedistributionofurbanAdolescentGirlsaccordingtotheirage

PercentagewisedistributionofurbanAdolescentGirlsaccordingtotheir qualification

PercentagewisedistributionofurbanAdolescentGirlsaccordingtotheir religion

PercentagewisedistributionofurbanAdolescentGirlsaccordingtotheirtype of diet

Percentage wise distribution of urbanAdolescent Girls according to their family income

SECTION-II:ASSESSMENTOFLEVELOFKNOWLEDGEONPCODAMONG ADOLESCENT GIRLS RESIDING IN JUNIOR COLLEGE OFAMRAVATI CITY.

Percentage wise distribution of knowledge score ofAdolescent Girls on PCOD
Mean&SDofknowledgescoreofAdolescentGirlson PCOD

Areawisepercentagedistributionofknowledgescoresof Adolescent Girls on PCOD
Areawisemean&SDofknowledgescoresofAdolescentGirlson PCOD
ItemanalysisofknowledgescoreofAdolescentGirlson PCOD

SectionIII: AssociationofknowledgeonPCODamongAdolescent Girls residing in junior college inAmravati city with their selected demographic variables.

Associationbetween knowledgeon PCODand age.

Associationbetween knowledgeon PCODand theirqualification

Associationbetween knowledgeon PCODand theirreligion

Associationbetween knowledgeonPCODand theirtype ofdiet

Associationbetween knowledgeon PCODand theirincome.

Theanalysisandinterpretationoftheobservationsaregiveninthefollowing section:

SECTION-I

DistributionofAdolescentGirlsresidinginjuniorcollegeinAmravaticity according to their demographic variables.

This section deals with percentage wise distribution of urbanAdolescent Girls with regards to their demographic characteristics.Arandom sample of 150 subjects was drawn from the study population, who were from selected junior college Amravati city The data obtained to describe the sample characteristics including age, qualification, religion, occupation and income respectively.

PERCENTAGEWISEDISTRIBUTIONOFURBANADOLESCENTGIRLSACCORDINGTO THEIR AGE (YRS.)
n=150

Demographicvariables according Totheirage	No.ofAdolescent Girls	Percentage(%)
10 -12 yrs.	40	26.6%
13 -14 yrs.	42	28%
15 -16 yrs.	55	36.7%
17-20 yrs.	13	8.7%

DistributionofAdolescentGirlsresidinginurbanarea,accordingtotheirage revealsthatthehighestpercentage(36.7%)werebelongedtotheagegroup

of10-12yearswhereastheAdolescentGirlswith13-15yearsare(26.6%). However, the Adolescent Girls with the age group of 15- 16 years are (28%)and agegroupof 17-20yearsofAdolescent Girlsareonly(8.7%). (fig. 4.1.1)

Hence,itwasinterpretedthattheagedistributionofAdolescentGirlsresidingin junior college inAmravati city was more or less similar.

PERCENTAGEWISEDISTRIBUTIONOFURBANADOLESCENTGIRLSACCORDINGTO THEIR QUALIFICATION.

Distribution of urban Adolescent Girls according to their qualification around (48%) Adolescent Girls was graduate and above, other 28% AdolescentGirlsqualificationwassecondaryeducation,(21.3%)

Adolescent Girls qualification was primary education and only (2.7%) AdolescentGirlswasilliterate.(figure-4.1.2)Henceitwasinterpretedthat the qualification of urban Adolescent Girls was more or less similar.

Demographicvariables according Totheirqualification	No.ofAdolescent Girls	Percentage(%)
Primaryeducation	72	2.7%
Secondaryeducation	62	21.3%
Graduation	08	28%
above	08	48%

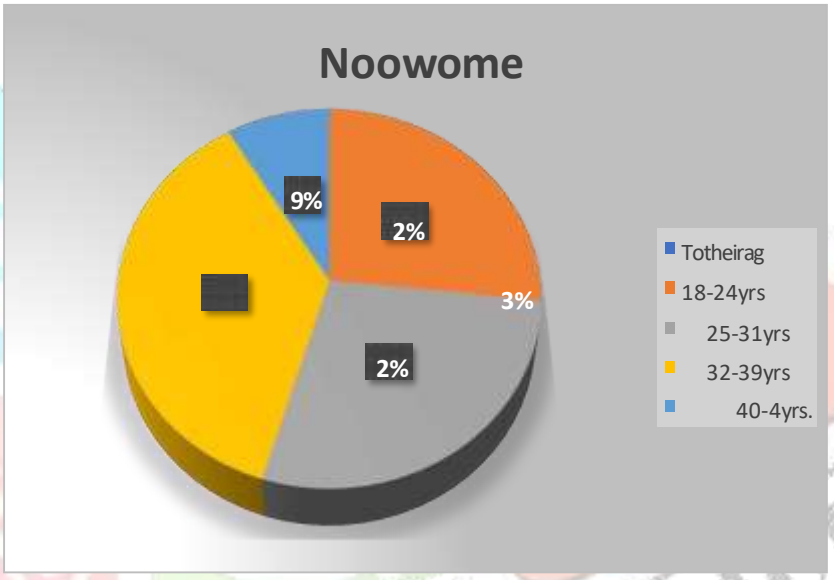


Fig:4.1.1PercentagewisedistributionofurbanAdolescentGirlsaccording to their age (yrs.)

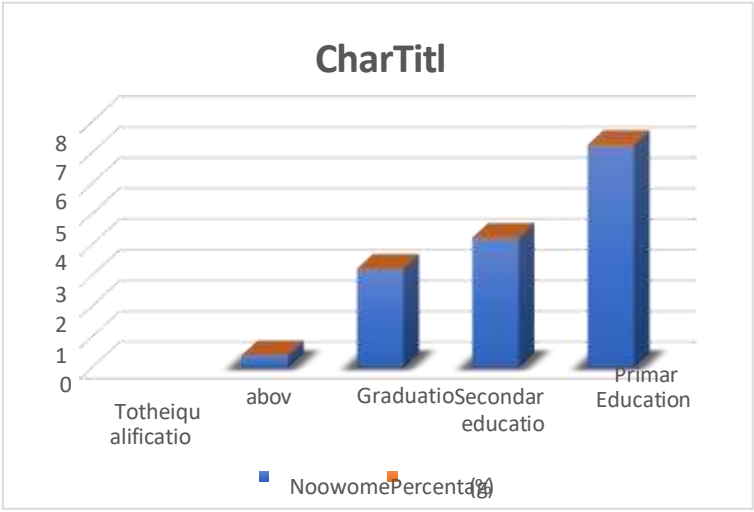
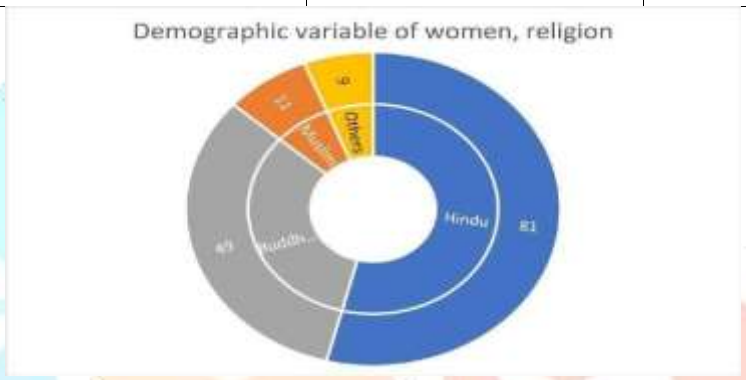


Fig:4.1.2PercentagewisedistributionofurbanAdolescentGirls according to their Qualification.

PercentagewisedistributionofurbanAdolescentGirlsaccordingto theirReligion

54% of urban Adolescent Girls was Hindu, (32.6%) Adolescent Girls was Buddhism,(7.4%)AdolescentGirlswasMuslimand(06%)AdolescentGirlswas from other religion.
it was Hence it was interpreted that the distribution ofAdolescent Girls according to religion was more or less similar. (fig. 4.1.3)n=150

Demographicvariableaccordin g to their religion	No.ofAdolescent Girls	Percentage(%)
Hindu	81	54%
Muslim	11	7.4%
Buddhism	49	32.6%
Others	09	06%

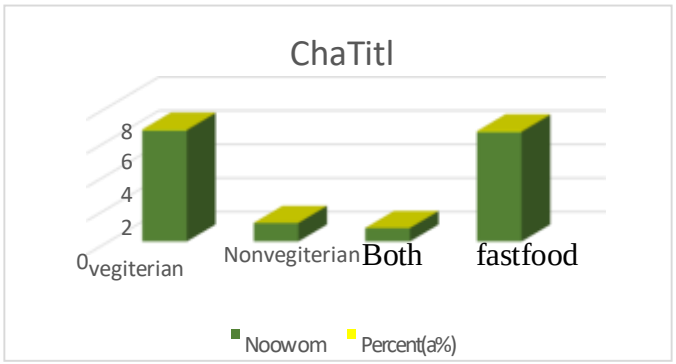


(FIG :4.1.3 PERCENTAGE WISE DISTRIBUTION OF URBAN ADOLESCENT GIRLS ACCORDING TO THEIR RELIGION)

PercentagewisedistributionofurbanAdolescentGirlsaccordingto their occupation.
DistributionofurbanAdolescentGirlsaccordingtotheirtypeofdiet(44%) of Adolescent Girls was vegiterian, (43.4%) Adolescent Girls were non vegiterianinotherlike both etc(7.3%)and 43.4%AdolescentGirls were non Fast food

n=150

Demographic variable according totheir type ofdiet	No.ofAdolescent Girls	Percentage(%)
Vegiterian	66	44%
Non-Vegiterian	11	7.3%
Both	08	5.3%
Fastfood	65	43.4%



(FIG. 4.1.4 PERCENTAGE WISE DISTRIBUTION OF URBAN ADOLESCENT GIRLSACCORDING TO THEIR OCCUPATION)

Percentage wise distribution of urban Adolescent Girlsaccording to their per capita family income

(36%)ofurbanAdolescentGirlswerehavingRs.15001-20000monthlyper capita income, (26%) of Adolescent Girlswere having 20001 and above, (17%) Adolescent Girlswere having 10001-15000 and only (20%) of Adolescent Girlswere having Rs. 10000 and below monthly per capita income.

Hence,itwasinterpretedthattheurbanAdolescentGirlsaccordingtomonthlyper capita income were more or less similar. (Show in **Fig:4.1.5** n=150

Demographicvariable according totheirfamilyincome	No.ofAdolescent Girls	Percentage(%)
Rs.20001 and above	39	26%
Rs. 15001-20000	54	36%
Rs. 10001-15000	26	17%
Rs.10000 and below	31	20%

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