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# **Pubertal Communication between School Nurses and Adolescent Girls in Nigeria**

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# Faculty Disclosure



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# Goals and Objectives



## Session goal:

- to describe the communication process that exists between the school nurse and adolescent girls on pubertal changes in Nigeria.

## Session objectives:

The Learner will be able

- to describe the contents of pubertal communication that occurs between the school nurses and adolescent girls in Nigeria.
- to identify the challenges encountered by school nurses in the course of communicating with the adolescents

# Introduction



- After the home, the school represents the second most influential environment in a child's life.
- Limited information available on puberty and sex is buried in biology and integrated science/basic sciences courses
- Link has been found between adequate information during puberty and reduction in teenage pregnancy in other countries (Jimmy *et al.*, 2011; UNAIDS, 2012)

# Introduction



- In Nigeria sex education in schools is yet to be introduced due to the country's socio-cultural background, religious belief and political systems. (Jimmy, Abeshi, Osonwa, Kalu, Uwanede & Offiong, 2013).
- In Nigeria sex education is still seen as a taboo to be talked about as a result of several misconceptions
- Hence, the need to explore pubertal communication between the school nurse and adolescent girls

# Statement of Problem



- Poor involvement of families in sexual education resulted in early sexual initiation, unprotected sex and increased teenage pregnancy (Ugochukwu *et al.*, 2011).
- Several physical and psychological problems have been linked with this period if not well handled (Mitra *et al.*, 2013).
- Teachers do shy away from certain aspect of adolescent reproductive health. (Aktar *et al.*, 2014)
- Little empirical studies exist on the involvement of school nurses in providing pubertal information in Nigeria

# Objectives of the study



- to examine the contents and methods of pubertal communication provided by school nurses to adolescent girl
- Assess the knowledge possessed by adolescent girls on pubertal changes
- Identify the challenges faced by school nurses when communicating with adolescent girls on puberty

# Hypotheses tested



- There is no significant relationship between adolescent girls' knowledge and frequency of communication of pubertal changes by the school nurses
- There is no significant association between selected socio demographics (age, parental educational level) and adolescent girls' knowledge of pubertal changes



# Conceptual Framework - Berlo's model (1963)



## School nurse (Sender)

### Characteristics of the school Nurse

Years of experience, Age, Knowledge, belief, school culture, school management)

## Content (Message)

Physical, emotional, cognitive changes  
menstrual hygiene, Self breast examination, Contraception, Teenage pregnancy prevention, STIs

## Channel (Method and Medium)

Individual & Group, Classroom teaching Demonstration

Verbal means, Posters, Pamphlet, Audio visual display, Pictures

## School adolescent girls (Receiver)

Age, Previous knowledge of pubertal changes,

Societal belief & system

Family characteristics (parental educational level, age, class)

# Methodology



- **Research Design** - Descriptive mixed-method design
- **Research setting** - Private secondary schools in Ile-Ife, Osun State, Nigeria.
- **Sample Size determination:** Cochran's sample size formula (Ofole & Agokei, 2013) ( $n = Z^2 pq / d^2$ )
- **Sample Size** = 420 adolescent girls [384 + 36 (9% attrition)], 10 school nurses
- **Sampling Technique (multistage):**
  - 3 Local government Areas were randomly selected
  - 5 private secondary schools were purposively selected
  - random selection of arms of classes
- Systematic random selection of girls with interval of 3.

# Methodology (ctd.)



- Purposively selection of school nurses
- **Research Instruments:** Questionnaire & Interview guide.
- **Validity** by Face and Content methods
- **Internal consistency-** Cronbach's Alpha (0.9)
- **Ethical Clearance:** IRB from Institute of Public Health, OAU, Ile-Ife Nigeria
- **Informed consent from parents and assent from respondents**
- **Analysis** – SPSS Version 20, descriptive & Inferential (Chi-square & Spearman's rho correlation),
- ATLAS ti 7 software with content analysis
- Level of significance =  $P \leq 0.05$

# Results



**Table I: Socio demographics**

Variable	Adolescent Girls	School Nurses
Age range (years)	10 -18	22- 43
Mean age	14±1.66	31.4±6.04
Highest age range	10-14 (67.9%)	20-39 (90%)
Age at onset of puberty (years)	Below 9 – 88.3% 9-12 – 9.28% 13-15 – 2.38%	-
Months of experience	-	4 -180

Some topics were avoided (Jimmy et al., 2013 ;Farih et al.,2014)

Knowledge vs frequency of communication ( $r=-0.099$ ;  $p=0.043$ )

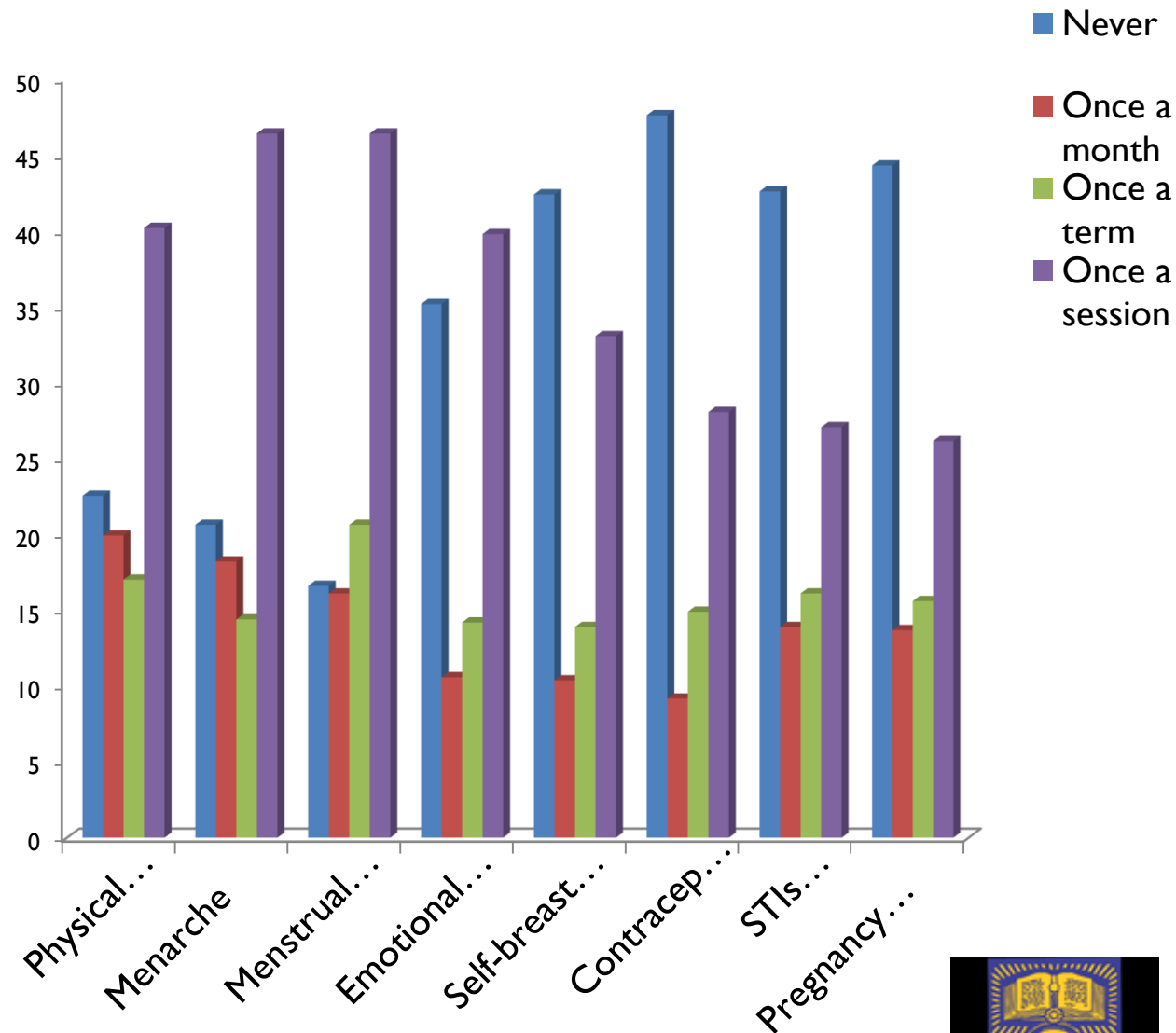
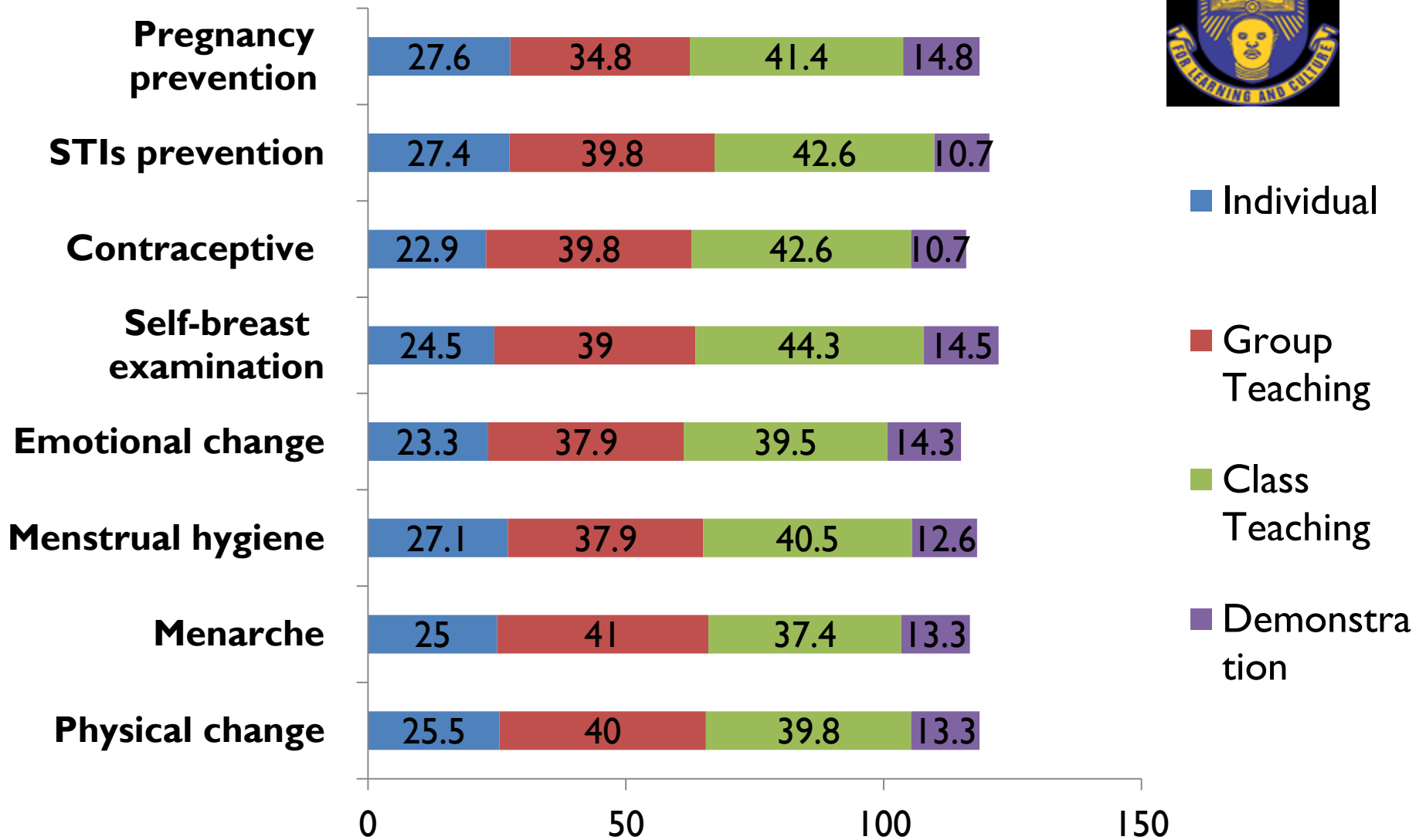
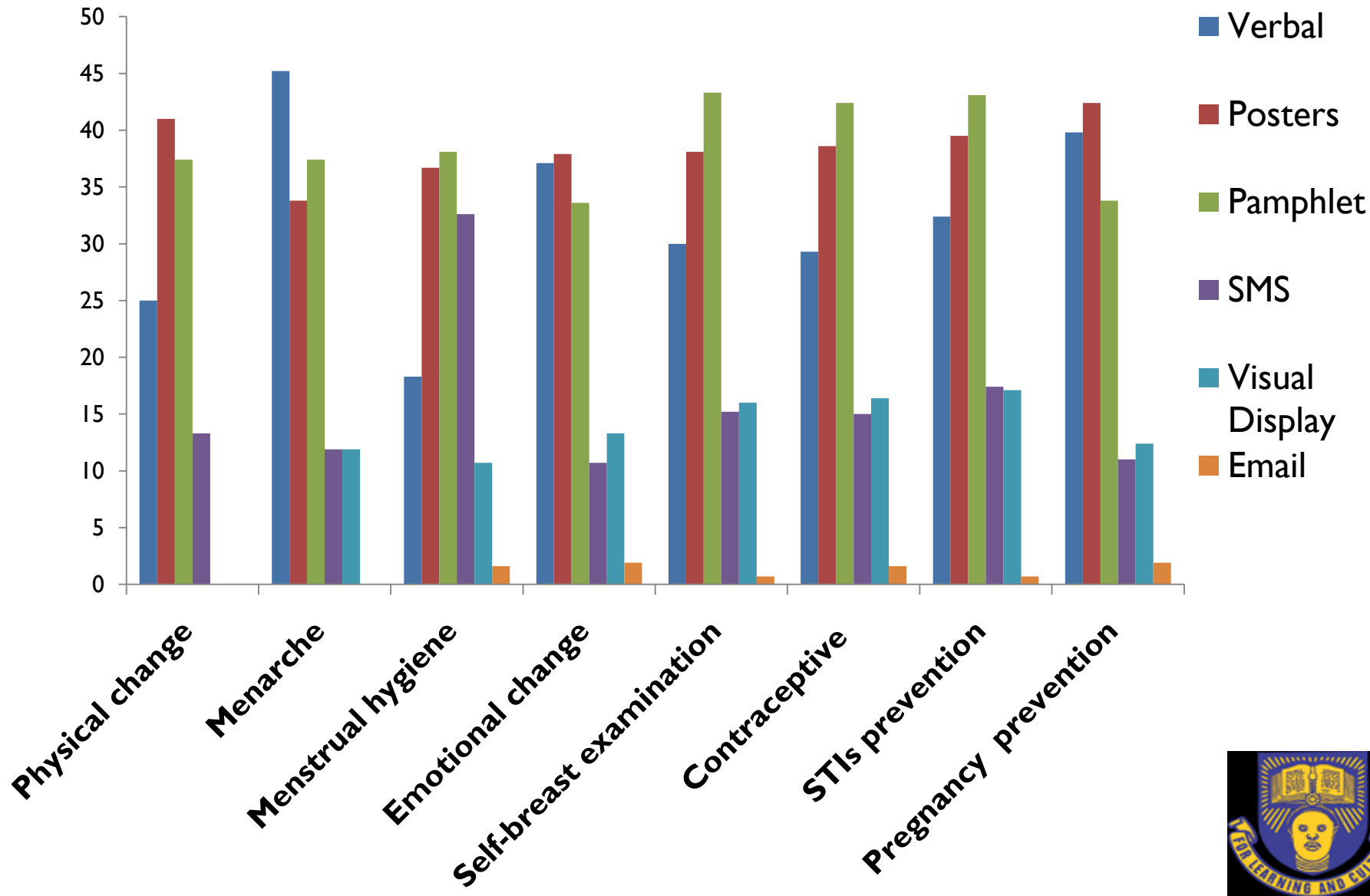


Fig 1: Contents and Frequency of Communication



**Fig 2: Methods of Communication**



**Fig 3: Medium of Communication**

# Fig 4: Knowledge of pubertal changes

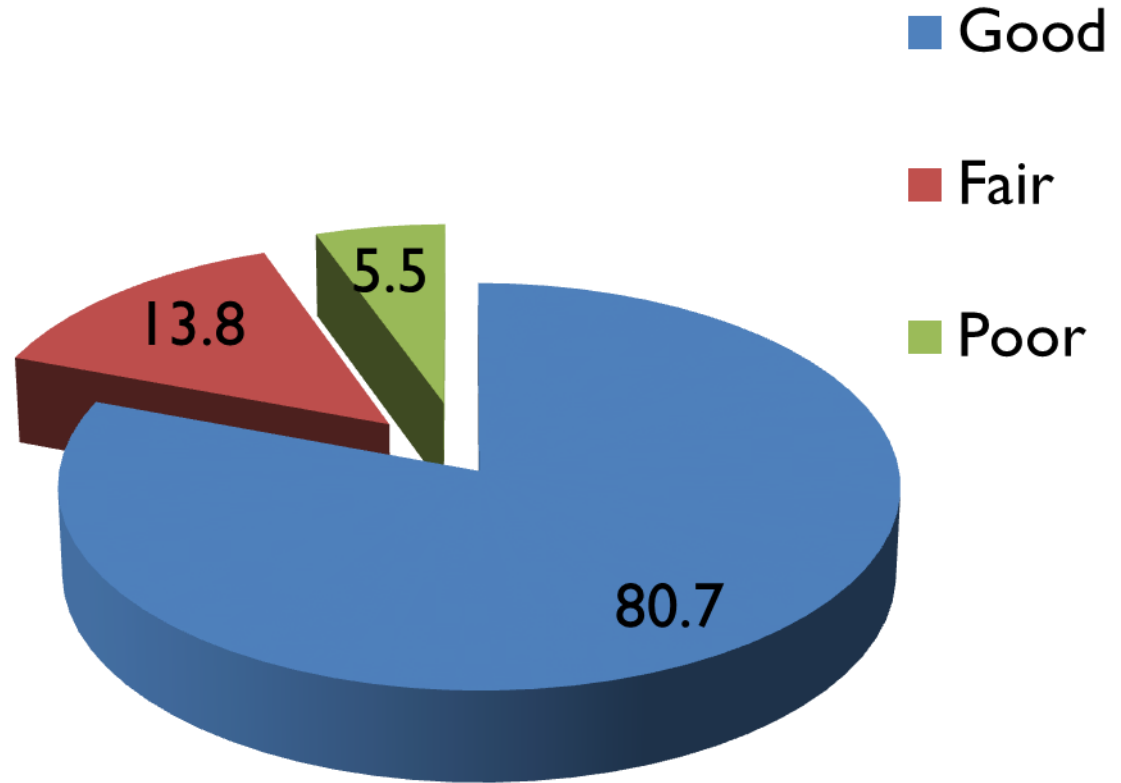
Knowledge vs  
maternal, paternal  
educational & grade  
levels

( $\chi^2=20.61$ ;  $p=0.008$ )

( $\chi^2=27.55$ ;  $p=0.001$ )

( $\chi^2=31.85$ ;  $p=0.000$ )

(Sahar et al., 2015)





# Qualitative results



- The findings from the interviews showed that the communication took place majorly verbally

***“We teach them orally and sometimes we demonstrate to them”*** (Middle aged school nurse)

- The school nurses also reported that pubertal communication do not occur frequently.

***“The school does not make it part of the school work but since I have interest in it, I do it but not really regular or often”*** (Middle aged school nurse)



# Qualitative results (ctd)

- Challenges encountered by school nurses include topic censorship by school management , time constraint and non availability of teaching/visual aids (Jimmy et al.,2013;Aktar et al.,2014,Farih et al.,2014)
- ***“I don’t have any virtual materials to explain about these changes or teach them well and in depth” (young adult school nurse)***
- Majority of the adolescents girls and nurses suggested that pubertal education be included in the school timetable.

# Conclusion



- Pubertal communication do not cover certain aspects of pubertal and reproductive health; some topics were intentionally avoided;
- School adolescent girls have good knowledge of pubertal changes
- Positive relationship exist between their knowledge level and school nurse communication on pubertal changes;
- Several challenges were encountered by the school nurses in the course of the communication.

# Recommendations



- Availability of educational aids made accessible to school nurses at the school clinic for pubertal education
- Inclusion of pubertal education into the extra curriculum activities in schools coordinated by the school nurse
- Revision of the country school curriculum with inclusion of pubertal and sexual contents taught by school nurses.

# Implication for school nursing



- Effective communication is an integral aspect of the school nurse responsibility towards the adolescent girls.
- Provision of frequently planned and explicit pubertal-age appropriate educational programs by school nurses.
- Use of well understood methods and media in providing the information
- Serving as support system for the adolescent girls during the period.

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