

Development and validation of reproductive health-knowledge questionnaire (RH-KQ) for adolescents

■ R. MISHRA AND S. GIR

Received: 29.01.2013; Accepted: 30.05.2013

See end of the paper for authors' affiliations

Correspondence to :

R. MISHRA

Department of Human Development and Family Studies, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA

■ **ABSTRACT** : The study's aim was to construct and validate a reproductive health knowledge questionnaire for adolescents. The Reproductive Health Knowledge Questionnaire (RH-KQ) consisted of 87 questions on selected aspects of reproductive health. The content of questionnaire was validated by and panel of experts. For assessment of reliability of questionnaire, a pilot study was conducted and forty adolescents (20 boys and 20 girls), between the age range of 13- 18 years (early adolescents-13-15 years and late adolescents 15-18 years) were selected from school of Udaipur city. For deriving reliability, split-half method was used. The reliability coefficient of tool was obtained as. 84. This finding of reliability and validity scores suggested that RH-KQ is an acceptable instrument for assessment adolescent's knowledge regarding reproductive health.

■ **KEY WORDS** : Reproductive health, Knowledge, Questionnaire, Validity, Reliability

■ **HOW TO CITE THIS PAPER** : Mishra, R. and Gir, S. (2013). Development and validation of reproductive health-knowledge questionnaire (RH-KQ) for adolescents. *Asian J. Home Sci.*, 8 (1): 353-355.

Adolescence is a time of gradual yet dramatic transition: socially, physically and psychologically. It is a "preparation period", during which the child develops into an adult. Since talking about reproductive health is a taboo in the Indian society most adolescents' go through adolescence with little or no knowledge of the body's impending physical and physiological changes (Gupta, 1998). A study by Government of Rajasthan (1995) explains that adolescents are at higher risk of stress because of lack of knowledge and awareness about puberty, menstruation, physical changes in the body, reproduction, contraception, pregnancy, childbearing, reproductive tract infections, sexually transmitted infections (STIs), and HIV (Gupta,1998). Adolescent's reproductive health stands out as an important aspect which is inadequately understood in Indian context. Apart from the sensitivity of the issues, parents and teachers do not know how to deal with their adolescent's reproductive health.

Reproductive health is probably one area of our lives about which we know so little and whatever little we happen to know about sex in bits and pieces through sources like

friends, acquaintances and cheap sex books. It is indeed ironical that while reproductive health is such an important in our life, adolescents is deprived in terms of scientific knowledge and are prone to its consequences.

Thus, the primary aim of this tool was to construct and validate a reproductive health knowledge questionnaire for adolescent both girls and boys in India. It is hoped that the publication of this questionnaire will open new vistas for understanding the knowledge level of adolescents regarding reproductive health, in rapidly changing scenario. We hope this diagnostic questionnaire will help psychologist, sociologists, health workers, counselors and guidance workers.

Development and validation of questionnaire :

The details of development and validation are explained below:

Construction of questionnaire :

The questionnaire was originally constructed by Mathur (1997) for the teachers and modified by Wasan (1999) for

adolescent girls. The questionnaire was adapted and modified by the investigator to assess the knowledge of students understanding on reproductive health issues. Tool was developed in both Hindi and English language. Tool contains 4 objective type responses for each question. Every right answer/response is assigned (1) one mark. The sum of mark is obtained for the entire questionnaire. The Description of the items and sub-items of questionnaire are presented in Table 1 and question format is given in Table 2.

Content validation of questionnaire (RH-KQ):

To establish the content validity, the questionnaire was given to specialists from the department of Human Development and Family Studies, Food Science and Nutrition, Extension Education, Psychology, Statistics, Gynecology and

Biology, for their judicious judgment and after the comments with regard to content, construction and language was taken and incorporated in to the questionnaire by the investigator.

The validation of questionnaires was based on five point rating scale – excellent, very good, good, and average. A score 5 was sought for ‘excellent’, 4 for ‘very good’, 3 for ‘good’, 2 for ‘fair’ and 1 for poor rating. For quality ranking of questionnaires on the basis of technical assessment mean scores were computed for selected parameters. Consequently mean score 1 – 1.8 was found for poor; 1.9- 2.6 for ‘fair’, 2.7-3.4 for ‘good’; 3.5- 4.2 for ‘very good and 4.3 – 5 for ‘excellent’ ranking of questionnaire. The calculated mean score was obtained as 3.98 for knowledge, which shows that the questionnaires were acceptable instruments to assess knowledge of adolescents regarding reproductive health.

Sr. No.	Aspects	Sub-aspects	Questions
1.	Indicator of emergence of gender identity	Pubertal changes and physical appearance and changes	15
2.	The growing body	Anatomy of male and female reproductive system	10
		Processes of reproduction	11
3.	Socio-emotional challenge associated with reproductive health	Marriages, pregnancy and abortion	7
		Family planning	9
		Sexually transmitted diseases	9
		Homosexuality	5
4.	Developing wholesome boy and girl relationship	Heterosexual relationship	6
5.	Physical health promoting reproductive health	Nutritive diet	8
		Vaccination	7
		Total	87

So.No.	Aspects	Questions on knowledge regarding reproductive health
1.	Indicator of emergence of gender identity	Adolescence is the phase of life When functional changes occurs in body When reproductive organs are fully matured From the onset of physiological changes till the time when reproductive organ fully mature Do not know
2.	The growing body	The male reproductive organ is?
3.	Socio-emotional challenge associated with reproductive health	Family planning is?
4.	Developing wholesome boy and girl relationship	Opposite sex attraction is –
5.	Physical health promoting reproductive health	Healthy food is recommended in adolescence because –

Note: There were four response options for each question as given in example 1

Reliability regarding age		Reliability regarding gender		Reliability score of whole questionnaire
Early adolescents	Late adolescents	Boys	Girls	
.84*	.89*	.85*	.82*	.84*

Reliability of questionnaire :

To establish reliability of the research tools, a pilot study was conducted. 40 adolescents (20 boys and 20 girls) between the age range of 13-18 years, were selected from the school (Gurunanak Public Sr. Hr. Sec. School Udaipur). For deriving reliability, investigator used split-half method. Reliability of questionnaire was determined at 5 per cent level of significance. The questionnaire had high reliability scores. Thus, it was said to be reliable for adolescent of both age and gender. Details of reliability index of questionnaire are given in Table 3.

Conclusion :

We tested the reliability of RH-KQ for the adolescent's population in Udaipur city of Rajasthan. The validity and reliability index suggests that RH-KQ is an acceptable instrument to assess attitude of adolescent boys and girls regarding reproductive health. It is hoped that this questionnaire will open new vistas for understanding knowledge of adolescent boys and girls regarding reproductive health in rapidly changing scenario. This questionnaire will prove to be useful for specialists and scholars of Human Development and Family Studies and allied fields.

Acknowledgement :

The authors wish to thank the panel members for their valuable suggestions. We also thank to adolescent subjects

for their co-operation. I confirm that personal details of subjects were only used for research work.

Authors' affiliations:

S. GIR, Department of Human Development and Family Studies, College of Home Science, Maharana Pratap University of Agriculture and Technology, UDAIPUR (RAJASTHAN) INDIA

■ REFERENCES

Government of Rajasthan, Department of Women and Child Development (1995). State Plan of Action for Children, DWCD, Jaipur (RAJASTHAN) INDIA.

Gupta, S.D. and Jain, Nutan (1998). A study of reproductive health awareness and sexual behaviour among adolescents. Institute of Health Management Research, Jaipur (RAJASTHAN) INDIA.

Mathur, N. (1997). Knowledge of Secondary School Teachers regarding selected aspects of sex education. M.Sc. Thesis, College of Home Science, Maharana Pratap University of Agriculture and Technology, Udaipur (RAJASTHAN) INDIA.

Wasan, S. (1999). Developing and educational package on sex education for urban adolescents. M.Sc, Thesis, College of Home Science, Maharana Pratap University of Agriculture and Technology Udaipur (RAJASTHAN) INDIA.

8th
Year
★★★★★ of Excellence ★★★★★