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# **Abstract Book**



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**ABSTRACT BOOK**  
**INTERNATIONAL CONFERENCE OF PUBLIC HEALTH**  
**FOR TROPICAL AND COASTAL DEVELOPMENT 2016**

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## PREFACE

The coverage of this book includes all abstracts of the papers that have been presented at the International Conference on Public Health for Tropical and Coastal Development 2016. The conference was held by the Faculty of Public Health Diponegoro University in collaboration with the Directorate General of Public Health, Ministry of Health, Republic of Indonesia from October 15 to 17, 2016. The venue of the conference was located in Hotel Patra Jasa at Semarang. Meanwhile, the opening remark was delivered by The Vice President of Republic Indonesia, HE. Dr. H. Jusuf Kalla during 59<sup>th</sup> UNDIP's Anniversary Ceremony on October 15<sup>th</sup>, 2016 in Prof. Soedarto, SH Auditorium at Tembalang Semarang, Indonesia.

Founded on January 4, 1985, the FPH UNDIP is the first faculty of public health in Central Java Province, Indonesia. As one of Indonesia's leading providers on public health education and research, FPH UNDIP is dedicated to improve the health of Indonesian population as well as the global community. The Dean of Faculty of Public Health and the Chairs of the Bachelor's Program in Public Health, Master's Program in Public Health, Master's Program in Health Promotion, Master's Program in Environmental Health and Doctorate's Program in Public Health were proudly welcoming the participants to the event.

This conference was intended to build a mutual collaboration and share experiences among graduate student, researchers, policy makers and stakeholder. It was an exciting event that was intended to draw a compelling attention and concern for academicians, researchers, professionals, administrators, leaders in health institutions, policy makers, industry representatives, under graduate as well as graduate students, and others who might related or had concern on the topic.

A total of 202 abstracts were presented in two days. More than 250 participants attended the conference. Geographically, the attendees came from Singapore, Thailand, Japan, Indonesia, United Kingdom and Australia. Selected peer-reviewed articles that have been presented in this conference will be considered for publication at the Advanced Science Letters, a multidisciplinary peer-reviewed journal. Subsequently, some articles will be selected to be published in the International Journal of Public Health for Tropical and Coastal Regions and the rest of the articles will be published in the proceeding registered by ISBN.

Gratitude thank goes to the reviewers from Indonesia, Australia, Singapore, Philippines, India and Japan who were greatly contributed to the success of the event.

I also would like to thank all participants, the members of the Organizing and Scientific Committee and most importantly the administration staff of ICOPH-TCD for putting this conference together.

Hanifa M. Denny  
Dean



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**RELATIONSHIP BETWEEN MEDIA INFORMATION AND KNOWLEDGE  
OF HEALTH REPRODUCTION SANTRI IN ISLAMIC BOARDING SCHOOL  
DARUT TAQWA BULUSAN SEMARANG**

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**Abstract**

**Background:** Boarding school as an educational institution should be contributing to give the clear information of health reproduction. The purpose of this study was to analyze the relationship between media and knowledge of health reproduction's information on students at the boarding school Darut Taqwa Bulusan Semarang.

**Methods:** This study uses a quantitative research with cross sectional approach. The population of an active student in the boarding school Darut Taqwa are 124 students and the number of samples using total sampling method. This research using univariate, bivariate analysis using Chi-square test, and also multivariate analysis.

**Results:** Chi Square test results found the relation between the diversity of the information of media, interpersonal media and print media. Multivariate test results print media is the most influential media on the level of health reproduction knowledge in students at boarding school Darut Taqwa.

**Conclusion:** These studies suggested to increase of using another resources according to the needs of students, the information of health reproduction module, health magazines, and health reproduction learning systems should use the print media which aims to improve student's health reproduction knowledge.

**Keywords:** Knowledge of health reproduction, Santri, Media Information, Islamic Boarding School



## Relationship between Media Information and Knowledge of Health Reproduction Santri in Islamic Boarding School Darut Taqwa Bulusan Semarang

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### 1. INTRODUCTION

The large number of composition population in Indonesia are teenagers, so the adolescent health reproductive remains one of the priority health programs in Indonesia. At the age of adolescence is a change in the physical, behavioral, cognitive, biological, and emotional.<sup>1,2</sup>

Health reproductive is still an issue for many teens. Generally in the boarding schools, health reproductive problems reach at 76 %. Many of those who have problems with the menstrual cycle, vaginal discharge, and itching of the genital area.<sup>3,4</sup>

Availability media sources of information and also open system of health reproductive teaching system depends on the type of boarding school. It is interesting to study, at boarding school Darut Taqwa

categories Comprehensive boarding school or a combination of traditional and modern teaching . So that students can receive information on health reproductive from media sources of information from inside and outside the boarding area. The role of the media to be important in build knowledge in understanding an adolescent health reproductive issues. The lack of proper information, will greatly influence the knowledge becomes less appropriate as well.

Because that cause the knowledge about health reproduction is still low in islamic boarding school. Based on the background above writer interested in the study entitled "Relationship between Media Information and Knowledge of Health Reproduction Santri in Islamic Boarding School Darut Taqwa Bulusan Semarang."



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## 2. METHOD

This research uses a quantitative research with cross sectional approach. The population of an active student in the Islamic boarding school Darut Taqwa are 124 students and the number of samples using total sampling method. This research using univariate, bivariate analysis using Chi-square test, and also multivariate analysis.

Research variable:

- The independent variables is the diversity of the information media, interpersonal media, new media (online), and the print media.
- The dependent variable is the reproductive health knowledge of students.

## 3. RESULTS

Univariate analysis conducted to review the independent variables and dependent variable. Bivariate analysis conducted by connecting the independent variables consisting diversity of media, interpersonal media, new media (online), and the print media with the dependent variable is knowledge health reproductive. Here are the results of analysis variable dependent and independent :

Table 1. Analysis of Relationship between The Diversity of Media Types with Knowledge of Health Reproductive

The diversity of media types	Knowledge of Health Reproductive				Total	
	Low		Good			
	f	%	f	%	f	%
Low exposure	28	66,7	14	33,3	42	100
Many exposure	30	36,6	52	63,4	82	100
p = 0,001	α=0,05				H <sub>0</sub> rejected	

Table 1 shows that the knowledge of health reproductive among respondents who has less is more prevalent in the group that are less exposed to the diversity of media types by 66.7%, compared with the group that many exposure to diversity of media types of 36.6%. The results of chi square test between the diversity of media types with knowledge of health reproductive shows that the p-value of  $0.001 \leq 0.05$ , which means  $H_a$  accepted and  $H_0$  is rejected, so it can be concluded that there is a relationship between the diversity of media information with knowledge of health reproductive of students at Islamic boarding schools Darut Taqwa Bulusan Semarang.

Table 2. Analysis of Relationship between Interpersonal Media with Knowledge of Health Reproductive

Interpersonal Media	Knowledge of Health Reproductive				Total	
	Low		Good			
	f	%	f	%	f	%
	Low Exposure	17	65,3	9	34,7	26
Many Exposure	41	41,8	57	58,2	98	100
p = 0,032	α=0,05				H <sub>0</sub> rejected	

Table 2 shows that student who has less knowledge of health reproductive among respondents is more prevalent in the group less exposed to interpersonal media amounted to 65.3%, compared with the group that many exposure to interpersonal media by 41.8%. The results of chi square test between interpersonal media with knowledge of health reproductive shows that the p-value of  $0.032 \leq 0.05$ , which means  $H_a$  accepted and  $H_0$  is rejected, so it can be concluded that there is a relationship between interpersonal media with knowledge of health reproductive of students at Islamic boarding schools Darut Taqwa Bulusan Semarang.

Table 3. Analysis of Relationship between New Media (Online) with Knowledge of Health Reproductive

New Media (Online)	Knowledge of Health Reproductive				Total	
	Low		Good			
	f	%	f	%	f	%
Low Exposure	26	56,5	20	43,5	46	100
Many Exposure	32	41	46	59	78	100
p = 0,095	α=0,05				H <sub>0</sub> accepted	

Table 3 shows that student who has less knowledge of health reproductive among respondents is more prevalent in the group less exposed to new media (online) amounted to 56.5%, compared with the group that many exposure to new media (online) by 36.7%. The results of chi square test between new media (online) with knowledge of health reproductive shows that the p-value of  $0.095 \geq 0.05$ , which means  $H_0$  accepted and  $H_a$  is rejected, so it can be concluded that there is no a relationship between new media (online) with knowledge of health reproductive of students at Islamic boarding schools Darut Taqwa Bulusan Semarang.



Table 4. Analysis of Relationship between Print Media with Knowledge of Health Reproductive

Print Media	Knowledge of Health Reproductive				Total	
	Low		Good			
	f	%	f	%	f	%
Low Exposure	32	60,4	21	39,6	53	100
Many Exposure	26	36,7	45	63,3	71	100
p = 0,009		$\alpha=0,05$		H <sub>0</sub> rejected		

Table 4 shows that student who has less knowledge of health reproductive among respondents is more prevalent in the group less exposed to print media amounted to 60.4%, compared with the group that many exposure to print media by 36.7%. The Results of Chi Square Test between print media with knowledge of health reproductive shows that the p-value of  $0.009 \leq 0.05$ , which means H<sub>a</sub> accepted and H<sub>0</sub> is rejected, so it can be concluded that there is a relationship between print media with knowledge of health reproductive of students at Islamic boarding schools Darut Taqwa Bulusan Semarang

Table 5. Summary Analysis of Relationship Independent Variables with Dependent Variable

The independent variables	P Value	R <sup>2</sup>	Information
The diversity of media types	0,001	10,6%	Related
Interpersonal Media	0,032	4,9%	Related
NewMedia (Online)	0,095	3%	Not Related
Print Media	0,009	7,3%	Related

Based on this research can be seen knowledge respondents about health reproductive are divided into two groups: the low knowledge by 46,8% and good knowledge by 53.2%. Respondents into the category of good knowledge health reproductive, but there are some points health reproductive issues that respondents are less understood, especially on sexually transmitted diseases, contraception, anatomy and function of the organs reproductive.

The diversity of media types in categories of many exposure  $\geq 5$  types of media information amounted to 66.1%. The amount of exposure of the diversity of the information media can support a person's knowledge. Media interpersonal in categories of many exposure  $\geq 3$  types of interpersonal media by 79%. Respondents answered

a lot of interpersonal media choice on board the boarding school. The print media in categories of many exposure  $\geq 2$  types of selection print media amounted to 57.3%. Media selection that has been chosen in the print media is books.

New Media (online) in categories of many exposure amounted to 62.9%. Multivariate analysis aims to determine the most dominant independent variable. The results of multivariate analysis:

Table 6. Multivariate Analysis

Variable	B	p	Exp (B)	R <sup>2</sup>
Print Media	-1,014	0,008	0,363	7,3%
Interpersonal Media	-1,030	0,030	0,357	4,9%
constant	0,782	0,005	2,187	

Multivariate analysis using a Multiple Logistic Regression testing of the two variables showed influence effect on knowledge of health reproductive is the print media. The value of R<sup>2</sup> shows that the strength of the relationship of print media by 7.3 % and interpersonal media by 4.9 %, print media is the strongest links and the variables that most influence on knowledge of health reproductive to the students, but the OR value of print media amounted to 0,363 (OR < 1), we can conclude that the variable print media or has a protective effect reversed.

#### 4. DISCUSSION

The results of this study explain, even though it was held learning about health reproductive among respondents in the boarding school, which is on the afternoon school (madrasah diniyah). But in reality not cover the whole material on health reproductive for the learning process system accordance age levels, because the learning give normative shari'ah education, morals, and yet related to health reproductive.

The level of knowledge is also seen by the respondents attitudes in the use of media. Utilization of the media can motivate positive behavior of its users. This research in line Norta Rizza research results of this study proves that there is a relationship between the type of mass media on adolescent reproductive health knowledge this is due to the higher use of the mass media, the level of reproductive health knowledge also high.<sup>5</sup>

The results of this study show that of the various forms of media, interpersonal media is the largest selection as a source of reproductive health



information. This is because the condition of the respondents who are in a boarding school environment for a long time so that the influence of the media only who are at boarding school in areas such as interpersonal communication. According Soekidjo role of interpersonal communication can be effective if it meets three things is, empathy, respect, and honest.<sup>6</sup>

Personal factors that affect interpersonal communication is, similarity of personal characteristics of people who has similar values, attitudes, beliefs, level of socio-economic, religious, ideological tend to like each other. The appeal on interpersonal communication interactions more interested recipients of the message to the messenger, the greater the message recipient to communicate with the giver messenger.<sup>7</sup>

The results of the variable media interpersonal results of this study are consistent with research Malta Albania on the results of these studies indicate There is a significant effect the quality of interpersonal communication on the level of knowledge of the communicant the higher the level of knowledge communicant and conversely the lower the quality of interpersonal communication, the lower the level of knowledge communicant.<sup>8</sup>

The results research from sources of information from print media conveys information in the form of stories, knowledge, and others. And can hold a lot of information depending on the number of its pages containing information on reproductive health and can be used as a medium learning health reproduksi.<sup>9</sup>

Kitab Kuning used at boarding Darut Taqwa is masailun nisa, qur'at al - 'uyun, mabadi and fath al - qorib. This study is in line with Mugiati research the relationship types of information received by the level of knowledge of adolescent health reproductive information from print media with the level of knowledge. This is because the information obtained from the print media such as books and magazines are able to provide high understanding to the reader because it is loaded with a deeper analysis than the other media.<sup>10</sup>

The results showed the new media (online) are not related because of the characteristics of respondents use the Internet as a source of reproductive health information. The results also are not related because of unavailability internet and facilities inside boarding school. It makes respondents access internet from outside area boarding school that is in the warnet (warung internet) respondent can go outside with permission board boarding school or during free hours on Sunday.

The results are consistent with research conducted by Dwi Widysari showed no correlation with the internet use of adolescent reproductive health knowledge. This is because adolescents who have a good knowledge feel no need to use the Internet to obtain information or otherwise obtained information on the Internet are less able to be absorbed or misinterpreted correctly by adolescent.<sup>11</sup>

Multivariate analysis showed the print media is a variable that has the strongest links and the variables that most influence on reproductive health knowledge to the students, but the variables are protective or has reversed effect. Variable print media, protective or has the reversed effect because more respondents read they are not necessarily understand or has not reached the stage of understanding.

Print media rely solely on writing certainly can not be heard by students, although it is already providing information through text and images, information will also be more closely if accompanied by audio or mentoring of students who have a good knowledge, the board boarding schools, and teachers for reduce misunderstandings reproductive health information.

Respondents were read they are not necessarily better understand the reproductive health is because as kitab kuning written with Arabic language, for some respondents difficult to understand the purpose or content of kitab kuning, although the kitab kuning is used as the primary medium in teaching health reproductive education informal in boarding school and books on formal learning in boarding school.

## 5. CONCLUSION

1. The level of knowledge of students about reproductive health showed in both categories at 53.2%. Overall the students are less informed about sexually transmitted diseases, contraception, anatomy and function of the reproductive organs.
2. Print media is the most influential media on the level of reproductive health knowledge that is protective (OR<1).
3. Students are included in the category of early adolescence amounted to 36.3%, students who are female at 58.9%, students with level of education senior high schools amounted to 54%, students who come from outside the region Semarang amounted to 86.3%.
4. Students are exposed to a lot of diversity of media types by 66.1 %, interpersonal media amounted to 79%, new media (online) amounted to 62.9 %, and 57.3 % of print media.



5. Variables related to knowledge of health reproductive that is the diversity of the information media (p-value=0.001), interpersonal media information (p-value=0.032), print media (p-value=0.009).

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