The Policy of Media and Internet Access for Seeking Environment and Health Information at Traditional Islamic Education, Indonesia

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Abstract: *Generally, traditional Islamic-based education system (SalafiyahPesantren) avoids the use of communication technology because it is considered to have negative impacts. However, along with the shift in the way of thinking of leaders (Kyai,) some Islamic Boarding Schools (Pesantren) have made an improvement i.e. they used communication technology. Several studies showed that communication technology has a positive effect on learning. This research attempts to compare the policy of the leaders of pesantren with communication technology literacy in teaching health and hygiene at environment of pesantren and those who are not. Further, it describes the doctrine of the Kyai in teaching health and hygiene, and explains the efforts of students at pesantren in fulfilling the needs of health information and environment information.*

Keywords: Salafiyah*pesantren*, *Kyai*, communication technology, education system, health information

1. Introduction

Islamic Boarding School (hereafter *pesantren)* has a big role in the development of education in Indonesia. In particular, the movement of *pesantren* thought gives a big influence in the development of politics, economy, education, and other social movements that originated from the thought of religious education environment such as *pesantren,* [1], [2]. The appearance of social movements, accompanied by the emergence of *pesantren*-based great figures cannot be denied anymore. In fact, one of Indonesia's presidents, K.H. Abdurahman Wahid, is a great figure of *pesantren* in Indonesia. Azra cited in Ibrahim[2], states that there are three main roles of *pesantren* in Indonesia, namely (1) as the educational institutions that transfer the religious knowledge and Islamic values, (2) as the religious institutions that conduct social control, and (3) as the religious institutions that perform social engineering. *Pesantren* has a strong role in generating middle-class elites that build Indonesia. Masykur[3] states that the 1990s era became a milestone of the *pesantren*intellectual progress that played some roles in the development of economics and politics.

This phenomenon cannot be denied that the image of *pesantren*as a conventional, traditional, lagging, and slum educational institution is always attached, especially, if it is linked to salafiyah-based *pesantren* education. Ruffled learning in the study of yellow book, classical learning method, and accentuation of one teacher (*kyai*) is closed with the change of the outside world. Meanwhile, the image and perception of *pesantren*of unhealthy environment remains inherent. The research conducted by Akmal, Semiarty, and Gayatri[4] showed that that "the students of *pesantren* are important subjects in the problem of scabies. Due to the data, most of people who suffer scabies are the students of *pesantren* boarding. The reason is to live together with a group of people in *pesantren* that puts them at risk of easily contracting various diseases, especially skin diseases".

Iskandar, cited Rohmawati[5], [6]and[7] mentioned that the incident of skin diseases such as scabies is because of the unhygienic lifestyles and habits. One of the dominant factors is the life in a relatively close and direct contact with each other. Furthermore, scabies generally attacks individuals living in groups such as *pesantren*, those in dormitories, correctional institutions, hospitals, densely populated settlements, and nursing homes [5], [8] states that "*pondokpesantren* is a place where has higher transmission of some diseases". Meanwhile, the population density in almost every *pondokpesantren* is very high, where every room with 15m width is occupied up to 15 people. Thus, there is a high morbidity rate in *Santri*, especially in certain skin diseases including scabies. In a research on other *pesantrens* in Padang, Akmal, Semiarty, and Gayatri. [4]reported that 34 people of 138 *santris* who became their research sample were suffering from scabies.

Meanwhile, Rofieq[9] explained that a number of illnesses have appeared due to the poor living habits of *santri*. One of them is a bad eating habit occurred from generation to generation. This is due to the limitations of individuals in preparing the food that may also be caused by the density of their schedule in *pesantren* and internal *pondok* environments that affect each other such as from friends' bad habits. As a result, they do not pay attention to daily food and beverages consumption. In fact, for male *santri*, it is not a few of them consume water that is not boiled. Finally, the quality of their health is unconsciously influenced by the daily bad habits in which the health of their lives decreases compared with the time when they have not become *santri* yet.

According to Kiptyah[6], in addition to the problem that has been previously mentioned, another problem that arise related to the health of *santri* during living in *pondok* is inadequate facilities such as buildings, bedrooms, bathrooms, and several rooms for studying and gathering. The health condition of each *santri* is greatly influenced by the hygiene conditions in their living. However, something happens is that the room they stay does not provide proper facilities to live in. As a result, this condition does not give comfort for learning and daily routine. It is then becoming opposite

perception of what has been thought by many people out there about *pesantren*.

On the other hand, the government, through the Ministry of Health, [10], had issued a Regulation of the Minister of Health concerning the Arrangement of Guidelines for the Implementation and Development of *Pesantren* Health Posts aiming at providing a reference for all stakeholders in the framework of organising and fostering *Pesantren* Health Posts. The core of *Pesantren* Health Posts activities is to empower the *pesantren*society, including both the *santri* and teachers, to be willing to and able to live healthily. The concept of empowering the *pesantren*society is to introduce them to the problems they face by themselves. Thus, the problems found are really perceived and agreed upon by them.

The success of *Pesantren* Health Posts is determined by the dissemination of information substance and information delivery media. Included in this case is the health programme. It means that there must be an information dissemination process or a health communication model that integrates various media resources. Bajari, et al.,[11] mentioned that the difference in the success of health information distribution between residents with high and low IPM was due to the role of communication media sources and public health promotion services.

At the same time, Wahyudin[12] showed that there is a regulation in *pesantren* that does not allow *santri* to watch television, listen to radio, read newspapers, access the internet, and use mobile phones except every Friday. This, of course, makes *santri* difficult to get some information related to health from a number of sources because the only source of health that they get is from their teachers. Therefore, they seem to ignore their health in *pesantren* whereas they really do not know about health more and deeper.

The emergence of various types of diseases among the salafi*pesantren*in the rural areas is certainly not according to the expectations of the programme of Clean and Healthy Life Behaviour (PHBS/*PerilakuHidupBersihdanSehat)* in West Java, which has been done through the programme of Public Health Office and Community Health Centre, [10]. Thus, the policy of range extension pursued in the effort of implementing PHBS communication campaign among the salafi*pesantren* in West Java is necessary for them to actively participate in the programme by Public Health Office and Community Health Centre in informing or communicating PHBS messages, as well as motivating, and persuading the *santri*of salafi*pesantren* in the rural areas. Therefore, the use of media convergence includes the incorporation or combination of various types of media previously considered as separate and distinct (e.g., internet, television, radio, and newspapers) into a single medium.

Health information conveyed through media convergence includes health information based on hadiths in the books studied in the *pesantren* and general health information. Thus, the *santri* of salafi *pesantren* get complete PHBS information through media convergence.

Based on the backgrounds explained above, this research was conducted with the following research questions: (1) How do the management of *pesantren* compile some policies and regulations in the use of communication and information technology in the internal environment of *pesantren*? (2) What efforts have been done by the *pesantren* in instilling health programs and clean and healthy living values? (3) How high is the level of *santri* needs in seeking information about health and hygiene in *pesantren* through technology or various media?

2. Materials and Method

This research used case study for the salafiyah*pesantren* in Sukabumi Regency, West Java, Indonesia. Case study was used to elaborate the phenomenon of *pesantren* and the use of information technology for searching *santri*'s health. Data collection was performed through in-depth interviews and observation of the *pesantren*in relation to the learning activity of *santri*. This research was conducted at two *pesantrens*, namely, SalafiyahRiyadusalafNeglasari Village Lengkong District and SalafiyahDarunNadwaCijulang Village, Jampang Tengah District in Sukabumi Regency.

Interviews were conducted with the head of *pesantren* (*Kyai*) and some seniors of the *santri* by discussing the use of information technology and their perception of health and hygiene. In addition, the interviews were also conducted with *Kyai*/*PondokPesantren* management to determine the policy and the *kyai*'s point of view on information technology, mass media, and the system of environmental and health process of *santri*. Interviews were conducted to ustaz (teacher) and leaders from two *pesantren* by four people and 30 *santri* from each boarding school ranging from junior to senior. In interviews, this study used field observation techniques.

This interview was developed in order to reveal about; *pesantren's* efforts in compiling policies and regulations on the use of communication technology for various needs of *santri*. Then explore the understanding of *santri* about health care programs starting from understanding environmental health, self-health, types of diseases, the importance of exercise, to the dangers of liquor including understanding of the symptoms of the disease. Finally, interviews were conducted in order to find out the efforts of the *santri* in finding the health information they needed.

Questions raised were regarding the use of communication and information technology in *pesantren*, the rules of communication technology use, the efforts to maintain hygiene and health in the environment and outside *pesantren*, the habits of discussing health information, the accuracy of health information from teachers/ustaz and the suitability of information with the need to maintain health.

Data processing was conducted by checking the completeness of the data, sorting the data according to the classification of questions, establishing and arranging categories, choosing and selecting paragraphs for each answer, and interpreting qualitative data in accordance with the interviewees' perspectives.

3. Results

3.1. (RQ1) How do the management of pesantren compile some policies and regulations in the use of communication and information technology in the internal environment of pesantren?

Entering the environment of the two *pesantren*s can be concluded as a significant difference in the attitude and behaviour of *pesantren* members in the life of their *pesantren*. The location of *pesantren*, arrangement of the environment, and structure of the buildings used seem to be different from each other. Riyadusalaf*pesantren* is a characteristic of *pesantren* that has changed or shifted the management and vision of education development. Although they used the yellow books to teach and are known as salafiyah *pesantrens*, in the management of the *pesantren* environment and learning, they are rather open to the changes in the outside world or modern *pesantren* (kalafiyah). In fact, they have a good *pesantren* infrastructure, with complete instructional technology, and *kyai*'s openness in using the yellow books to is not limited to merely the classical/conventional methods.

Mosque facilities, study room (*kobong*), and residence of students are well arranged and meet the requirements of adequate open spaces and cleanliness. Air ventilation, public kitchens, meeting and study rooms, and toilets have shown that the bad habits of the traditional *pesantren*no longer exist. For instance, they no longer use one large bathroom space together. This indicates that the *pesantren* managers are aware of the importance of clean and healthy living. According to *Kyai*, the arrangement is done in such a way that it takes into consideration Islam is a religion that is very concerned with cleanliness, which is part of their faith. Openness can be seen in the use of communication and information technology. According to *Kyai*as the leader of *pesantren,* there is policy or openness to the importance of communication technology for the learning and information to be used in the *pesantren*environment. The availability of this facility, the use of internet network for *santri* laboratory, and also the openness are always ready with the changes that take place. At certain hours, the *santris*are allowed to utilise the internet and other support devices according to the schedule that has been arranged for them. Even in their teaching process, the *ustaz*and *kyai* have been using devices such as LCD projectors, laptops, smart phone-based technology, digital Al-Quran, Safinah and Jurmiyah books, which have been developed with digital storage devices.

Santri has a good effort in finding health information. They are even trying to take advantage of the television and gadgets to meet the information needs. In addition, *pesantren* has provided quite good clinics and *pesantren* boarding unit. *Pesantren* is responsible for the health of *santri*. As the result of interviewing *kyai*, *santri* is not fully prohibited to utilize the media (including internet) to learn and seek health information and then discuss it with the ustaz/*kyai* if there are different opinions.

On the other hand, the DarunNadwa*pesantren* has the characteristics of pure Salafiyah*Pesantren*. The education process for male and female *santris* still uses the traditional approach. Learning objectives, learning process, and measurement of learning outcomes are not formulated and formally documented in the curriculum. The whole process of education depends largely on the ability of the *kyai* to remember all things related to the *pesantren* education.

This *pesantren* is not open or receptive to information and communication technology. The *kyai*does not allow the *santris* to learn and use mass media, as well as other information technology devices such as smartphones, android or other gadgets. In short, the *kyai* strongly forbids the use of technology. Some of the *santris* only get to use them when they return to their respective villages.

The efforts to meet the needs of health information were only obtained through the discourse and teachings from *kyai*/ustaz. In addition, both *pesantren*s do not have a health *pesantren* unit and clinics for treating of *santri*. The results of Ikhwanudin's research [7]explained that the *santris'* responses to healthy way of living are rather low as seen from modern health indicator. This is because the *pesantren*s have different cultures when compared with the society living outside these *pesantren*s. It can be seen from three aspects:
1) In maintaining health, *santri* still defends them from illness and keep their health in a simple way.
2) In an effort to utilise the health system, *santri* refers to the health knowledge that they know.
3) The attitude of environmental health of the *santri* is closely related to the structure and cultural and religious values in *pesantren*.
4) The effort of rationalisation of PHBS by adjusting with the cultural and religious values in *pesantren* to improve *santris'* health status.

3.2. (RQ2) What efforts have been done by the pesantren in instilling health programs and clean and healthy living values?

Before discussing about efforts or health programs in the *pesantren* environment, first the data from the survey results are cited about complaints of diseases suffered by *santri*. The survey results showed that of the 85 students who were recorded, 68.6% had complaints (diseases) and 31.4% said they did not have any complaints. The most common complaints (diseases) are dyspepsia 25.6%,respiratory problems (URI = Upper Respiratory Tract Infection) such as bronchitis, asthma and flu 17.4% and skin disease such as scabies and itching 9.3%.

Table 1: Kinds of *Santri* Disease

No.	Kinds of disease	Frequency	Percent
1	Skin disease	8	9.3
2	Digestive disease(Dyspepsia)	22	25.6
3	Respiratory problem	15	17.4
4	Others	14	16.3
5	No complaints	27	31.4
	Jumlah	86	100.0

Sources: Research Survey at three locations of *pesantren* in West Java, 2018.

Table 1 illustrates the health status of *santri* where most students have complaints or health problems. If traced through qualitative observations through interviews and observations of *santri* and boarding school administrators, efforts to address their health problems can be seen in the following explanation.

The results of field observation of each *pesantren* have the same intention to achieve good value in a clean and healthy way of living. Source, thought, and perception of clean and healthy way of life come from Quran and Hadith where the effort has generated awareness, knowledge, and understanding, and even the meaning of clean and healthy way of living information.

The *santri* have their own perspective in looking at the concept of clean and healthy way of living. As for the sources of information for the *santri*, those considered as closely related to the meaning of clean and healthy way of living are: **f**irst,Information of clean and healthy way of living obtained from the *kyai*and *ustadz* is considered as reliable information. It is conveyed through the stories of the former through parables, new facts, and asking questions. This information is able to attract or frighten people about clean and healthy way of living (*al-targhibwa al-tarhib*).

Second, Information of clean and healthy way of living obtained from the books that they have learned by themselves in the *pesantren* is considered to be reliable information. It is conveyed through the stories of the former through parables, new facts, and asking questions. This information is able to attract or frighten people about clean and healthy way of living (*al-targhibwa al-tarhib*). Third, information of clean and healthy way of living obtained from medical/health personnel is regarded as reliable information. It is conveyed through visual and attractive technology (*al-targhibwa al-tarhib*). Fourth, Information of clean and healthy way of living obtained from schools is considered to be reliable information. It is conveyed through visual and attractive technology (*al-targhibwa al-tarhib*).

As an example of their awareness towards hygiene and health, the *santris* always refer to the history exemplified by the Prophet Muhammad SAW. For instance, the image used as a reference by the *santri* is the story of the Prophet Muhammad SAW in which he prevented the transmission of disease by quarantining patients that is similar to the technique of disease treatment. *Bekam*method and Ruqyah method are generally familiar in the *santri* and *pesantren* environments. Bekam is used to cleanse the blood by disposing dirty blood in physically ill individuals. Ruqyah is used as an attempt of health rukhani to cleanse the mind and heart from various problems and anxiety.

3.3. (RQ3) How high is the level of santri needs in seeking information about health and hygiene in pesantren through technology or various media?

A study of the pesantren in Indonesia, generated two classifications of the pesantren in applying the learning process. The first type of teaching patterns is the salafipesantren which only teaches religious education based on their reference yellow books, and second type is kalafipesantren which combining traditional and modern curriculum (English, Arabic, mathematics and natural sciences).

Traditional Islamic boarding schools only study the yellow book, where the contents of the yellow book study can be seen in table 2.

Table 2: The Curriculum of Salaf*Pesantren* Existence

No.	Curriculum of *Pesantren* Existence
1	Nahwu, shorof, balaghoh
2	Al-Qur'an, ulumul Qur'an, tafsir, hadith, musthalahah hadith/hadith knowledge, tajwid
3	Tauhid, akhlaq, history
4	Fiqh/jurisprudence, ushulfiqh

Sources: Research Survey at three locations of *pesantren* in West Java, 2018.

Second, the kalafi*pesantren* has formal and life skill education. The *pesantren* with life skill conduct the package education programme to enable *santris*to retrieve general knowledge. This strategy is chosen because it is an effort to help *pesantren*to adapt well particularly in facing changes in the mind-set of society in sending their children to school.

Comparing the two patterns of learning management, knowledge and general knowledge such as health knowledge has greater chances to be taught in the *pesantren* environment, which is in the second management format. It is the management formats in which the *santri*s are taught as general knowledge, life skill programmes, and development of professional curriculum that is more interesting for parents/guardians to send their children to the *pesantren*.

The research revealed that both the *pesantrens* have different visions and missions in learning. As a result, the treatment of *pesantren* towards *santri* is explicitly different. The Riyadusalaf*pesantren* gives flexibility to the *santris*to have access to communication technology and a variety of information. In contrast, the DarunNadwa *Pesantren* is more closed as it forbids *santris* to utilise communication technology.

Some of the students interviewed at the Riyadusalaf *Pesantren* said that they were given the freedom to watch television, read newspapers, listen to the radio, and use smartphones. The rules were used during holidays or breaks, while newspapers and television are provided in the lobby area of *pesantren*give *santris* chances and time to watch television or read newspaper although these are rather less frequently and in limited period. As for listening to the radio, they took advantage of their smartphones that provide them access to the radio in a limited time allotted. Nonetheless, smartphones or mobile phones equipments are not allowed to be brought into the classrooms. They are allowed to use smartphones in the *kobong* (*santri*'s boarding house).

They retrieve information on health from certain media such as about mother and child health, nutrition and healthy food, as well as environmental health like waste disposal practices, maintaining drains and ditches, and springs and home environment. In addition, they are also exposed to

information on the dangers of smoking and alcoholic drinking.

Similarly, the *santris* are allowed to use the internet for social media, browsing, *googling*, and even downloading information required as learning materials. Meanwhile, health information that is sought (searching) through smartphones is about diseases and drugs. Furthermore, they are also accustomed to discuss health issues with their colleagues. In conclusion, the *santri* Riyadusalaf *pesantrens* are exposed to information and use of media to seek for any information and health information needed by them. In fact, most of them said that the information on mother's health, mother-children and nutrition, environment, lifestyle, and public health was obtained through media and smartphones is considered as good and beneficial for their needs in the *pesantren*.

On the other hand, the Darun Nadwa *pesantren* totally prohibits the use of mass media and internet. Health information is solely obtained from the religious teachings by the *kyai* or *ustadz*. They get the information about the importance of maintaining physical or body health, preventing disease, washing hand before eating, nutrition, and disposal of wastes from their *kyai*. The methods used for teaching or delivering health information are combined with religious subjects. However, sometimes they get information on health from lectures and media counselling conducted by The Community Health Center (Puskesma), Jampang.

4. Discussion

Like a unique enclave that in the era of media convergence, there is still a community that closes entirely to the presence of media and communications technology. It becomes more unique that the policy of closing the media presence is conducted by educational institutions that usually provide space for learning and developing creative and innovative attitudes for their students.

Salafiyah *pesantren* through the *kyai* mostly holds a strong principle to avoid the influence of media by banning *santri* from using the communication technology. The *kyai* thought that the media had a bad influence on the purification of Islamic teachings organized by *pesantren*. If religious learning is adequate to be met by ustaz/*kyai*, the needs of *santris* to meet the needs of health information, hygiene or knowledge for their life skills after they graduate from *pesantren* certainly cannot be met by the ustaz and *kyai*.

In this case, if the rules are properly regulated, the media can perform dissemination functions of knowledge and learning as well as complement other information that is not provided by *pesantren*. Communications technology and convergence media has been proven to contribute to the improvement of knowledge and behavior in a better direction in building society. Technology is the principal driving force of society determining its mode of operation, development, course of history, structure and values in a decisive manner,[13], [14],[15]. Eze and Eza[16] explained the advantages of media in which audio-visual media is the most effective media in teaching and learning activities because it can help and encourage students to understand the lessons well,

especially religious learning. Furthermore, Heinich[17] and Agarwal [18] stated that the media are capable of supporting improvement in learning or instructional outcomes stating that "the most common use of media in an instructional situation is for supplemental support of the instructor in the class room to enhance learning.

According to Bitzer and Bodroaux[17], [19], nursing students who are learning about caring for newborn mothers and computer-based pharmacology (CAI) have saved significant time in completing learning materials. William and Roderick (1968) and Gillespie [20] mention that students who study with various media (multimedia) showed significant learning outcomes better than the learning results of other groups. Nevertheless, in other experiments (Spencer in Schramm, 1984), the results had no significant differences about the use of instructional TV with learning machines.

If being so, drafting a policy that closes the role of media and cuts off students for not accessing the media, on the aspect of consideration of the positive effect to increase health information literacy is inappropriate. *Santris* can learn directly from the media to get information about health and interact with the outside world on how to live clean and healthy. When the learning curriculum does not provide formal health information, then the media is a viable alternative. At some levels, the media has the ability to teach and provide knowledge to the users. Thus, it is necessary to socialize and educate *pesantren* leaders to understand the media from the aspect of positive influence.

Pesantrens that are slightly open to the media, even already providing internet technology and personal computer, should be pursued more selective development. They can develop applications based on the needs of *pesantren* in meeting the needs of the learning process and the insight of *santri* related to their health, cleanliness and provision of life skill. This application development makes it easier for *pesantren* to monitor media usage by *santri* while providing open space between students, *pesantren* and the outside world.

5. Conclusions

Based on the results of this study, it can be concluded that; First, both the *pesantrens* have opposite policies in the utilisation of communication and information technology (converging media). The first type *pesantrenis* provide openness towards the use of mass media, internet and cell phones, gadgets and instructional technology devices. The second type *pesantren* is a pure Salafi *pesantren*. The education process continues to use the traditional approach to education. This *pesantren* is rather closed towards information and communication technology. The *kyai* do not allow the *santris* to use mass media and other technology such as smartphones, androids, or gadgets.

Second, both the *pesantrens* share a common view on the importance of health and hygiene. The doctrine and principles of clean and healthy life are derived from the *Kyai* teachings that refer to the Qur'an and Hadith. The source of the doctrine on the health from the *kyai* is taken as true and must be obliged.

Third, both the *pesantrens* have different policies in relation to the use of convergent media to seek for health-related information. The opened *pesantrens* were given the freedom to use mass media and smartphone. They get information on maternal and child health, nutrition handling, and healthy food that give benefits to their body, environmental health such as proper disposal of garbage, maintenance of drains and gutters, springs and home environments. In addition, they also get exposure to information on the danger of smoking and alcoholic drinking. The second type of *pesantren* prohibits the use of mass media and internet. Most information on health is obtained from religious teachings by the *kyai* or *ustadz*. They retrieved information on the importance of maintaining physical or body health, preventing disease, washing hands before eating, as well as the importance of nutrition and proper disposal of garbage from their *kyai*. It takes some efforts to build the literacy of Ustaz/*Kyai* about media and communication technology that is useful for learning and developing *santris'* creativity and innovation. In addition, to facilitate monitoring of media usage and information search for *santri*, *pesantren* can develop media usage and application-based information in accordance with the needs of *pesantren*.

6. Acknowledgement

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