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COVID-19 and hepatitis B Ambassador of Surabaya, Indonesia: Motivation, commitment, and knowledge of youth generation towards health programs in the pandemic era

COVID-19 y Hepatitis B Embajador de Surabaya, Indonesia: Motivación, compromiso y conocimiento de jóvenes generaciones hacia programas de salud en la era pandémica

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SUMMARY

Background: *To curb Corona Virus Diseases 2019 (COVID-19) pandemic and Hepatitis B further spread, the local Health Ministry collaborated with local communities to build COVID-19 and Hepatitis B Ambassador. This program utilizes the youth generation to support health promotion and health prevention. This study aims to evaluate the motivation, commitment, and knowledge of the youth generation as very few studies have attempted to analyze them.*
Methods: *Fifty-seven participants who participated in the Ambassador program were voluntarily enrolled in the study. We conducted an online survey and presented them with a questionnaire while monitoring*

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their progress in the live video call. The qualitative and quantitative data were analyzed statistically to find the correlation between the variables.
Results: *The youths' motivation for joining health programs comprises benefit-driven motivation and mostly altruistic motivation. Most of the youth participants gave a high number of commitment percentages and good opinions regarding both disease management by the local government. There is a significant correlation between the participants' commitment with their knowledge regarding Surabaya and COVID-19 (p<0.001), but not with hepatitis B (p=0.153). There is a significant positive correlation between participants' knowledge of Surabaya city with knowledge of COVID-19 (r=0.255; p=0.018) and Hepatitis B (r=0.331; p=0.003). The participants' age affects their commitment significantly (p<0.001).*
Conclusion: *The motivation, commitment, and knowledge of the youth generation that joining the health ambassador program were correlated with each other. These findings might give an insight, especially for the government to encourage the youth generation to help supporting health promotion and health prevention.*

Keywords: *Motivation, commitment, knowledge, COVID-19, hepatitis B, Ambassador, youth.*

RESUMEN

Antecedentes: *Para frenar la pandemia de enfermedades por el virus de la corona 2019 (COVID-19) y la propagación de la hepatitis B, el Ministerio de Salud local colaboró con las comunidades locales para construir COVID-19 y hepatitis B Embajador. Este programa utiliza jóvenes generaciones para apoyar la promoción de la salud y la prevención de la salud. Este estudio tiene como objetivo evaluar la motivación, el compromiso y el conocimiento de la generación joven, ya que muy pocos estudios han intentado analizarlos.*
Métodos: *Cincuenta y siete participantes del programa Ambassador se inscribieron voluntariamente en el estudio. Se realizó una encuesta en línea y se presentó un cuestionario mientras se monitoreaba su progreso en la videollamada en vivo. Los datos cualitativos y cuantitativos se analizaron estadísticamente para encontrar la correlación entre las variables.*
Resultados: *La motivación de los jóvenes para unirse a los programas de salud comprende la motivación impulsada por los beneficios y la motivación mayoritariamente altruista. La mayoría de los jóvenes participantes dieron un alto número de porcentajes de compromiso y buenas opiniones con respecto al manejo de la enfermedad por parte del gobierno local. Existe una correlación significativa entre el compromiso de los participantes con su conocimiento sobre Surabaya y COVID-19 (p<0,001), pero no con la hepatitis B (p= 0,153). Existe una correlación positiva significativa entre el conocimiento de los participantes de la ciudad de Surabaya con el conocimiento de COVID-19 (r= 0.255; p= 0.018) y Hepatitis B (r= 0.331; p= 0.003). La edad de los participantes afecta significativamente su compromiso (p<0,001).*
Conclusión: *La motivación, el compromiso y el conocimiento de jóvenes generaciones que se unieron al programa de embajadores de la salud se correlacionaron entre sí. Estos hallazgos podrían dar una idea, especialmente para que el gobierno aliente a la generación de jóvenes a ayudar a apoyar la promoción y la prevención de la salud.*

Palabras clave: *Motivación, compromiso, conocimiento, COVID-19, hepatitis B, Embajador, juventud.*

INTRODUCTION

Since March 2020, Indonesia has been dealing with the new Corona Virus Diseases 2019 (COVID-19) pandemic, and the incidence has been increasing up dramatically until October 2020. Data from the Health Ministry of Indonesia showed that COVID-19 cases have spread almost into all provinces nationwide and the highest prevalence was documented in Java islands (1). Java is the most populous island in the world with an estimated 152.4 million population living in 2020 (2). Among big cities in the Java islands facing difficult conditions during the pandemic era, Surabaya is the second biggest city in Indonesia comprising a population of more than 2.9 million (3). The huge population often corresponds to the high risk of infectious disease transmission (4). Indeed, data from the Health Ministry of Indonesia shows that Surabaya has a high level of COVID-19 spread in pandemic (1).

Several programs were made by the health ministry of Surabaya to control COVID-19 transmission including health promotion and health prevention (5). These programs need a good method for disseminating information to all population sectors throughout Surabaya city and internet-based technology (e.g. by social media and online article) can be a good choice (6). Several studies from different countries have proven that this method has a robust impact (6-9). Furthermore, the utilization of internet-based

technology can also reduce the direct face-to-face interaction between health educators and population targets during the pandemic.

Besides COVID-19, hepatitis B also became a special concern for the local health ministry. This is because Surabaya had the highest incidence of hepatitis B in East Java Province (219 of 432 total cases) according to the Health Ministry of East Java Province(10). Several factors might be related to the high prevalence of these diseases including educational and socioeconomic levels. Good health promotion and health prevention programs are crucial to stop the hepatitis B chain of infection for the lower educational and socioeconomic levels of the Surabaya population.

Surabaya still facing many problems of health programs regarding COVID-19 and hepatitis B. Factors such as wrong community believes, hoaxes (either mis- or dis-information), and other wrong health issues give a huge impact on the success rate of the health program (11). For example, there was wrong community believes said that immunization or vaccination of COVID-19 and Hepatitis B was not appropriate for local religion (12). Indeed, this wrong community believes made the immunization scope of Hepatitis B almost did not reach the national target in 2017 and bring up some polemics issues regarding upcoming COVID-19 vaccines in 2020 (13-15). People especially from low educational and socioeconomic levels, which health promotion somehow difficult to reach, easily believe any kind of health issue. They got these issues from mass media either non-electronic (e.g. illegal leaflet) or electronic (e.g. social media). Special for social media, this electronic media is a well-known main source of hoax spread all over the world including Indonesia, one of the biggest Internet user countries in the world (16,17). The local health ministry needs to withstand those issues with optimization of health promotion, but it seems difficult since many other health problems also need to be prioritized. Therefore, the help and support of the appropriate member community, especially those who close to digital technology, are essentially desired to reach many levels of Surabaya citizens as the main target of the health program. One candidate of this appropriate member community is the youth generation.

The role of the youth generation as the closest generation to digital technology is needed to increase the scope target of health promotion and health prevention (18). The fact that the general population of Surabaya was dominated by young adults supported the idea to build an innovation program exploiting the critical role of the youth generation. This innovation program, called COVID-19 and hepatitis B Ambassador Surabaya, was built by the Health Ministry of Surabaya, Universitas Airlangga, and several youth communities to tackle COVID-19 and hepatitis B problems by improving health promotion and health prevention. Several studies explained the role of health ambassadors countering health problems in the communities (19-21), but studies that explore the motivation and commitment of the youth generation to become a health ambassador have not been extensively studied yet. This study aimed to depict the interest of the youth generation to curb COVID-19 and hepatitis B by joining a health ambassador program. We described their motivation to join the ambassador program, their commitment, and their knowledge regarding Surabaya, COVID-19, and hepatitis B. Besides, we analyzed the correlation between the respondents' age and their commitment as well as their commitments and the degree of their knowledge. This study is important to give insight, especially for the government to encourage the youth generation to participate in and supporting health promotion and health prevention.

METHODS

Design, participants, and setting

The COVID-19 and hepatitis B Ambassador is a youth community built by the Health Ministry of Surabaya, Universitas Airlangga, and several youth communities. The member of the ambassador was selected based on several steps and criteria. This study sought to explore the underlying motivation of the youth generation in joining the ambassador selection program and their knowledge about COVID-19, hepatitis B infection, as well as Surabaya city. This study employed an analytical cross-sectional design. The participants under investigation

were the youth generation who signed up in the COVID-19 and hepatitis B Ambassador Selection program. To recruit the participants, we were put up promotional flyers at several university campuses and schools also social media platforms (Instagram and Facebook) targeted at those who were interested in becoming members of the ambassador. The youth generation was chosen as the main subject of this study because the study primarily aims to investigate the youth's roles as intermediaries between society and social services. The youths have unique perspectives of social roles designed for the promotion of community health.

The inclusion criteria were people aged between 15 and 30 years old and who were currently staying in Surabaya. These ages were selected according to the definition of youth by the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) as well as other countries in Southeast Asia including Indonesia policy (22-24). From a total of ±100 participants who registered for the program, 86 participants were recruited according to the inclusion criteria of the study. The exclusion criteria are those who were not willing to participate in the survey. A total of 57 participants managed to complete all of the questions provided and were subsequently analyzed.

Data Collection Procedures

As a sample for the investigation, a group was chosen which comprised young people who actively participated in the COVID-19 and hepatitis B Ambassador program. All participants of this group voluntarily took part in this study. At the beginning of the program, we sincerely and politely invited each participant to participate in the program evaluation. We informed the participants that participation was completely voluntary and that they had the right to withdraw from the survey at any time.

In the beginning, we collected demographic data of the participants using a questionnaire. The investigators established another self-validated questionnaire consisting of quantitative components and qualitative components. They included a set of multiple-choice questions, which assess participants' knowledge of Surabaya city, COVID-19 disease, and hepatitis B disease, and several open-ended questions, which assess participant's commitment level and motivation in attending this ambassador program. To ensure integrity during this process, the participants answered the questionnaire online through the Google forms portal while the investigators monitored the participants through the zoom platform.

Data analysis

The results of the questionnaire were coded in SPSS Statistics for Windows, version 16.0 (SPSS Inc., Chicago, Ill., USA), and statistical analysis is conducted. We analyzed the quantitative data, using descriptive statistics. We compared several variables through paired t-tests. Further, each estimated effect was provided with a 95 % confidence interval and a 5 % level of significance. The qualitative data were analyzed by conducting a content analysis of all of the responses. Similar responses were grouped into several categories.

RESULTS

1. Sociodemographic characteristics of the participants

The Sociodemographic characteristics of the participants varied as shown in Table 1.

From 57 participants collected, the genders of the participants were dominated by females (68.4 %). Meanwhile, the age of participants is dominated by those under 20 years old (61.4 %). In terms of education, the participants were in or had done High School (7.0 %), Diploma (12.3 %), and bachelor's degree (80.7 %). Education and occupation are dominated by people related to the medical and health job. The majority of the participants' place of current residence was East Surabaya (57.9 %).

2. Participants Motivation and Commitment

Concerning motivation to join the ambassador program, our data showed that there were two

Table 1

Sociodemographic characteristics of the participants (n = 57)

Variables	Freq (n)	%
Gender		
Male	18	31.6
Female	39	68.4
Age (years)		
15-20	35	61.4
21-30	22	38.6
Education		
Senior High School	4	7.0
Diploma	7	12.3
Medicine and Health	5	8.8
Others	2	3.5
Bachelor	46	80.7
Medicine and Health	20	35.1
Others	26	45.6
Occupation Status		
High School Students	2	3.5
College Students	46	80.7
Office Workers	7	12.3
Medicine and Health	1	1.8
Others	6	10.5
Unemployment	2	3.5
Place of current residence		
Central Surabaya	7	12.3
East Surabaya	33	57.9
West Surabaya	3	5.3
North Surabaya	4	7.0
South Surabaya	10	17.5

major categories of motivation named benefit-driven motivation and altruistic motivation (Table 2).

A large majority of our participants (87.0 %) have altruistic motivation. Altruistic motivation consists of the desire to enhance the welfare of others instead of oneself. This includes the hope to be able to curb the COVID-19 and Hepatitis B infection cases through health promotion, give social support to maintain health, and contribute to society. The majority of the participants (68.4 %) felt a strong need to suppress the infection rate of COVID-19 and hepatitis B infection by participating in the ambassador program.

Some participants also have benefit-driven motivation such as the expansion of social networks, gaining new knowledge, gaining new experience, and developing public speaking skills. About 45.0 % of our participants admitted to having these benefit-driven motivations. This shows an exchange between the ambassador's contribution to the campaign activity and the ambassador's benefits in return. Gaining new experience and new knowledge both present as the highly ranked benefits expected by the participants.

Table 2

Motivations of the participants

Motivation	Freq (n)	%
Altruistic motivation		
Help to suppress COVID-19 and Hepatitis B burden through health promotion	39	68.4
Provide social support to maintain health	9	15.8
Contribute to society	6	10.5
Self-centered motivation		
Gain new experience	14	24.6
Gain new knowledge	14	24.6
Develop communication skills	7	12.3
Social networking	6	10.5

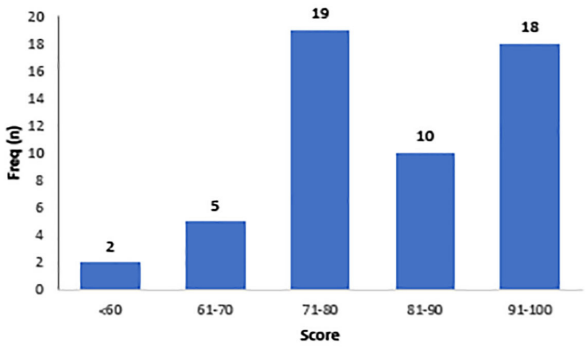

Figure 1. Participant commitment to join and active in the ambassadors' program.

Each frequency of commitment level was shown in Figure 1. Of all participants, 35.2 %, falls between 71.0 to 80.0 %. While 33.3 % of participants committed 91.0 – 100 % of their effort to this ambassador program. Further analysis regarding different commitment between men and women participants showed an

insignificant result (p= 0.328) (Supplementary Table 1).

3. Their opinion regarding COVID-19 and Hepatitis B condition in Surabaya

We measure qualitatively COVID-19 and hepatitis B from the participants. The open question was "What do you think about the current condition of Surabaya in the face of high cases of Hepatitis B and COVID-19? Give your good advice to the city government; the people of Surabaya and this ambassador in the future."

From all participants, 48.0 % of participants' shows good enough result, with 31.0 % worry about the condition, 19.0 % very worrying condition and only 2.0 % shows the government achieves very good performance (Figure 2).

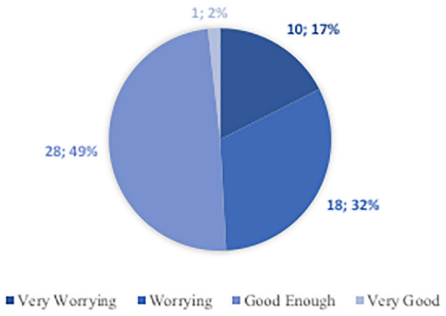

Figure 2. Opinion regarding COVID-19 and Hepatitis B condition in Surabaya (n=57).

4. Participants Knowledge Regarding Surabaya, COVID-19, and hepatitis B

We measure quantitatively the knowledge of participants (n=57) about the knowledge of Surabaya, hepatitis B, and COVID-19 with multiple-choice questions. The variety of results is figured in Figure 3. There was no cut-off definition that has a high score or low score in this questionnaire.

In COVID-19 knowledge, most participants gain a score of 60. In hepatitis B knowledge, most participants achieve a score of 80. And from the knowledge of Surabaya City, most participants achieve a score of 70. In addition, we also compare the participants' knowledge of men and women (Table 3).

In general, knowledge regarding Surabaya, COVID-19, and hepatitis B were higher for male participants compared to female participants. This was shown as the mean of men's knowledge of Surabaya (72.22), COVID-19 (68.89), and hepatitis B (90.00) were higher than women's, but further statistical analysis showed that only knowledge of hepatitis B was significantly different between men and women (p= 0.003) (Table 3).

Furthermore, we also analyzed the correlation between the participants' knowledge regarding Surabaya to the knowledge of COVID-19 and hepatitis B (Table 4).

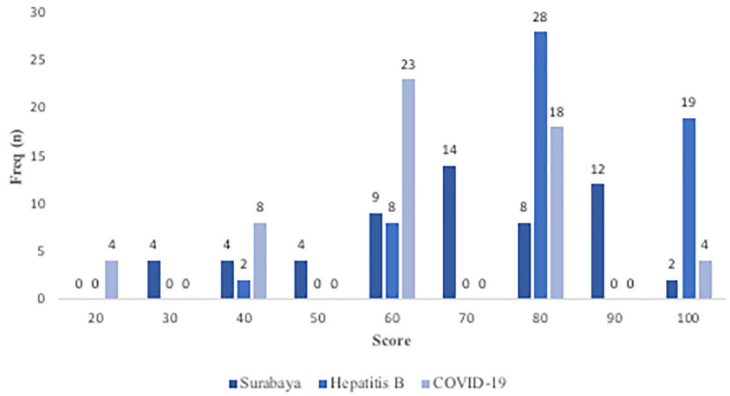

Figure 3. The participant score for three consecutive questions about the knowledge in Surabaya, Hepatitis B, and COVID-19.

Table 3

Knowledge of Surabaya City, COVID-19, and hepatitis B between male and female participants

Variables	Mean	Median	Minimum	Maximum	SD	t-test		
						t	df	P
Knowledge of Surabaya								
Men	72.2	70.0	40	90	15.2	1.045	43.4	0.302
Women	67.2	70.0	30	100	20.3			
Knowledge of COVID-19								
Men	68.9	80.0	20	100	23.0	1.276	27.4	0.213
Women	61.0	60.0	20	100	18.3			
Knowledge of Hepatitis B								
Men	90.0	90.0	80	100	10.30	3.073	49.9	0.003**
Women	79.0	80.0	40	100	16.5			

**Significant <0.01

Table 4

Correlation of the participants' knowledge regarding Surabaya to the knowledge of COVID-19 and hepatitis B

Variables	n	r	p
Participants' knowledge regarding COVID-19	57	0.255	0.018*
Participants' knowledge regarding Hepatitis B	57	0.331	0.003**

*Significant <0.05; **Significant <0.01

There was a positively weak yet significant correlation between participants' knowledge regarding Surabaya to the knowledge of COVID-19 (r= 0.255; p= 0.018) and hepatitis B (R= 0.331; p= 0.003).

5. Correlation between commitments to the degree of knowledge and age

This study showed a significant correlation between the participants' commitment with their knowledge regarding Surabaya and COVID-19 but not with hepatitis B. These results were proven by p<0.001 after statistical analysis measuring those variables (Table 5). On the other hand, the participants' age affects the devoted commitment proposed by the participants significantly (p<0.001). It seems young adult participants are compliant to provide more effort to become the ambassador.

Table 5

Correlation between commitments to the degree of the knowledge

Variables	t	df	p
Participants knowledge regarding Surabaya	-5.519	56	0.000*
Participants knowledge regarding COVID-19	-7.485	56	0.000*
Participants knowledge regarding hepatitis B	-1.450	56	0.153

**Significant <0.01

DISCUSSION

This study depicts the interest of the youth generation to withstand COVID-19 and hepatitis B by joining a health ambassador program. The sociodemographic of youth generation as participants in this study was varies and encompass all region of Surabaya. The majority motivation to join the ambassador program was they want to help to suppress COVID-19 and hepatitis B burden through health promotion along with gaining new experience. The commitment was majority high. Their knowledge regarding Surabaya, COVID-19, and hepatitis B were generally good, especially for understanding the diseases. The statistical analysis showed that the participants' age was correlated with their commitment. Only participants' knowledge regarding Hhpatitis B was different between men and women. There was also a positive correlation of participants' knowledge regarding Surabaya to the knowledge of COVID-19 and hepatitis B. Furthermore, the analysis also revealed that commitments were correlated with the knowledge regarding Surabaya and COVID-19 but not with hepatitis B.

From the demographic data of participants that were collected, the participants were dominated by females. This is in accordance with the population of Surabaya in 2019, where the government data showed that the number of females (50.59 %) is more than male (49.41 %) (25). These findings supported a theory that health promotion related to social activities is usually dominated by females (26). Furthermore, college women had better interpersonal relationships and health responsibilities compare to college men (27,28).

The demographic data also revealed that in terms of education, the majority of the participants who were interested to join the ambassador program were in or had done a Bachelor's degree. This is concordant with a study carried out by Yang et al, which showed that educational level had a positive correlation with health literacy (29). Higher education levels seem to have higher interest to join positive social activities including health programs. This might because education is a fundamental social determinant of health, which is an upstream cause of health (30).

In this study, education and occupations are dominated by participants with health-related backgrounds. This result was in line with a previous study that showed that people who majored in medical fields had positive health-promoting lifestyles. An individual with medical knowledge background can encourage a community to adopt health-enhancing behaviors (31). Special for college students, those who took medical majors had better cognitive understanding and perception of health information than those who took nonmedical majors. A previous study also showed that college students with medical majors were more willing to engage in appropriate health behaviors. This willingness is explained by the fact that medical majors' campus trains them to conduct health promotion for the community (32,33).

The altruistic motivation displayed in the data represents public service motivation (PSM). PSM is defined as the beliefs, values, and attitudes beyond organizational and self-interest, which also corresponds to the interest of the larger political body, and inspires individuals to act accordingly (34). PSM put motives and actions directed to serve the community as a central theme. There are three kinds of motives revolving around public service. Rational motives refer to people's desire to contribute to good public decision-making as a social responsibility or as a self-esteem enhancement. Norm-based motives refer to aspirations to maintain social equity by serving the nation or public interest. Affective motives involve emotional bonding with service users and compassion, which can lead to self-sacrifice. Helping to suppress COVID-19 and Hepatitis-B infection is included as rational motives. The willingness to contribute to society is regarded as norm-based motives. Lastly, the desire to provide social support for the community refers to affective motives (34).

Gaining new experience and new knowledge become the two highly ranked benefits expected by the participants from joining this ambassador program. As expected, other ambassador programs provide the opportunity for the participants to gain professional or "soft skills" to ensure success in future endeavors. While this ambassador program generally caters to society at large as its primary goal, it serves as an equally valuable but unstated goal of developing

ambassadors' skills and attitudes. This program also provides an avenue for networking with other professionals, more senior ambassadors, and perhaps other senior stakeholders (35).

It is worth mentioning that the lowest participation rate in volunteering for community services was among people below 35 years old and above 65 years old (36). This tendency showed that youth participation in community service was low and factors such as lack of motivation might be the reason. Therefore, public stakeholders should consider the motivation that drives the participation of youths in ambassador programs while promoting youth volunteering for community services (37).

This study asserted the ambassadors' opinion on COVID-19 and hepatitis B in Surabaya. The devastating effect of the COVID-19 pandemic and the speed of government tackling the issue might affect the opinion of the participants regarding their satisfaction with the governmental pandemic management. In other countries, the satisfaction of the participants towards COVID-19 was affected by how the government controls the virus spread by optimization of their management (38). Specific in Surabaya, the pandemic curve was not showing any massive increase and tends to stagnate. One reason was that the local health ministry did a proactive action to apply for several programs either online or offline classic lectures and workshops for health workers to increase the quality of COVID-19 management. These programs were proved to be effective to increase the knowledge and skill of health workers, therefore their management more optimum (39). This might be a reason for the majority of participants' opinion that said the management of COVID-19 in this city was "good enough". In concordance with COVID-19, data from the Health Profile of Surabaya in 2018 report shown that Surabaya had 0 cases of Hepatitis B even though there were 1 154 positive cases of Hepatitis B in the 2017 report (13,40). This 2018 report might become the reason why Surabaya people did not give special attention to Hepatitis B and thought that hepatitis B control management was "good enough" as well as COVID-19. The participants' answers were often related to the number of cases only as of the parameter of good management.

Generally, our study showed that males had better knowledge than females even though the statistical analysis only showed significant differences in the hepatitis B topic. This was concordant with a study conducted in a developing country, which showed that the mean of men's knowledge was higher than women's regarding health issues (41). In contrast, another study from a different country found that women had better knowledge of HBV transmission modes than men (42). This phenomenon seems to depend on the population and the health topic that was carried out. Furthermore, women seem to easily have a psychological impact more than men. That might affect their knowledge, especially in this pandemic era. This theory supported by a study from China showed that females were significantly associated with the higher psychological impact of the COVID-19 outbreak and preventive measures (43).

Our study showed that there was a positive correlation between the participants' knowledge of Surabaya with COVID-19 as well as hepatitis B. This means that higher knowledge of Surabaya might affect higher knowledge of both diseases. This result might be explained by a theory of Social Capital (SC). The theory explained that there were seven dimensions of SC: Social participation, social network, civic participation, social support, trust, the norm of reciprocity, sense of community (44). SC can contribute to the field of health promotion especially in developing countries (45-47). In this research, knowledge about Surabaya city could be included as a component of social capital that increases the sense of community. Increasing the sense of community contribute to health promotion, therefore, increase the knowledge of the community regarding COVID-19 and Hepatitis B in Surabaya.

This study revealed a significant correlation between the participants' commitments to the knowledge of COVID-19 and Surabaya but not with hepatitis B. Several studies showed that the number of health promotion programs was improved tremendously especially in this pandemic era. The aim of the program mostly to inform some knowledge regarding COVID-19 hence people's awareness shall improve quite significantly (48). In concordance with the previous study, our participants who had good

knowledge regarding COVID-19 and Surabaya were looked more confident and willing to devoted more commitment so they can contribute better (49). Special for Hepatitis B knowledge, the participants' knowledge was generally high either in the low or high commitment participants. This made the correlation became not significant. In addition, the fact that commitments have a significant correlation to the degree of knowledge reflects that commitment is important for increasing the knowledge of youths regarding health topic.

Our study showed that age was correlated with participants' commitment to join the program. Supports our result, another study showed that young adults have more conscience regarding health issues and more capable to manage their health problems (50). Those qualities enable young adults in this study to participate more significantly to prevent health problems. Young adults can determine more important information, qualified ones, so the risk of biased information is smaller (51).

CONCLUSION

COVID-19 and hepatitis B became a special concern for the Surabaya health ministry. The support from the youth generation as the closest generation to digital technology is essential to increase the scope of the target of health promotion and health prevention. This study showed the major motivation for the participants to join the program was benefit-driven motivation. A significant correlation between the participants' commitments to the degree of knowledge reflects that commitment is an important factor to increase the knowledge of youths regarding health topics. Increasing youth knowledge regarding their city could give a positive correlation to their knowledge of diseases. Knowing the motivation, commitment, and knowledge of the youth generation is the important step to gain the support of youths in health promotion programs.

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Supplementary

Supplementary Table 1. Commitment to join the ambassador program between men and women participants

Variables	Mean	Median	Minimum	Maximum	SD	t-test		
						t	df	p
Commitment								
Men	82.9	80.0	65	100	10.7	-0.993	33.8	0.328
Women	86.2	85.0	50	100	12.7			

From the table above, we could see that that women had higher commitment than men even though this difference was not significant. This finding is in concordance with a study by Bayati *et al* in 2018 that found that women ambassadors had better health literacy than men (52). Better health literacy might encourage women ambassadors to build self-confidence in educating and promoting health knowledge. Furthermore, high confident might affect their commitments to join the health ambassadors program.