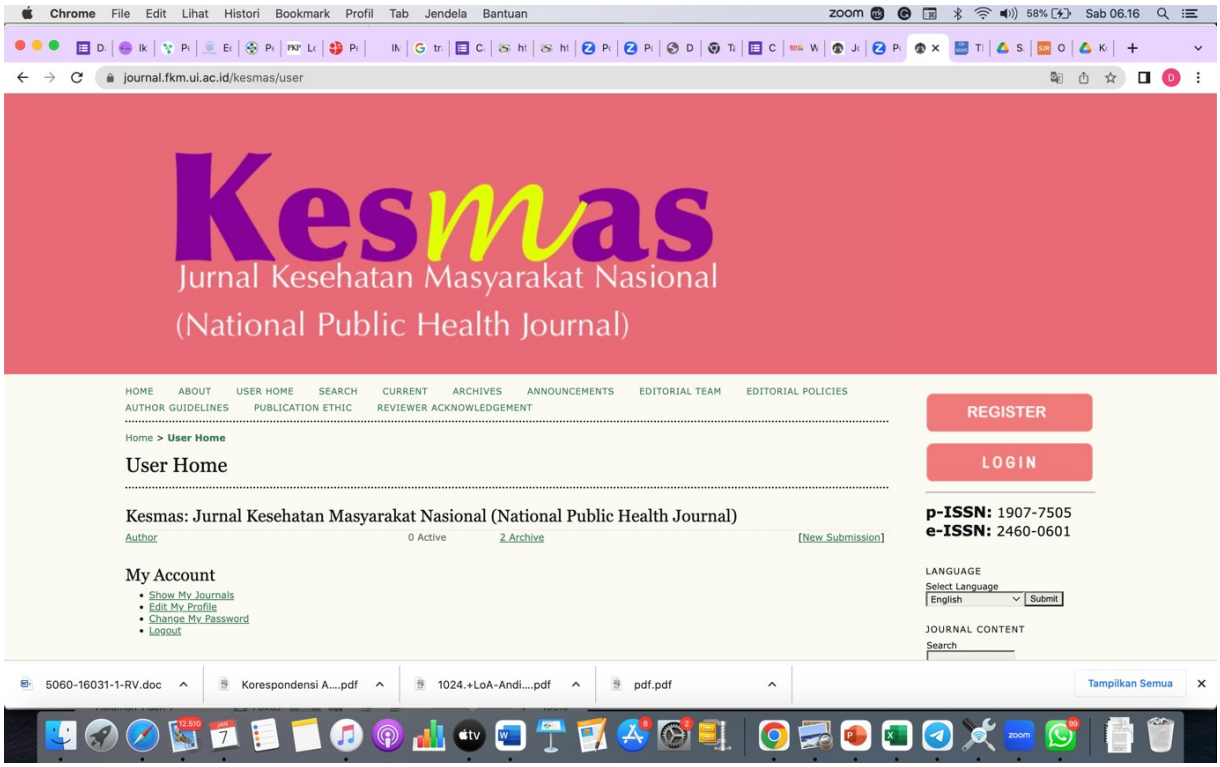
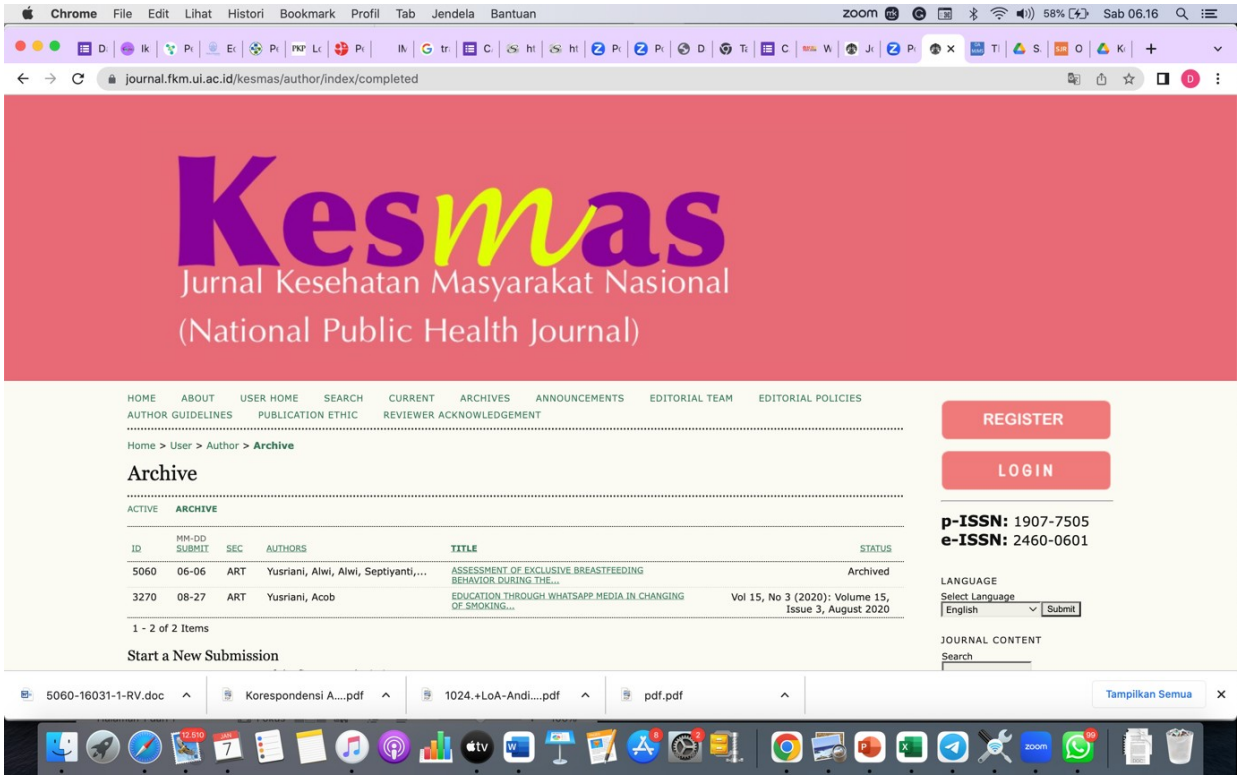
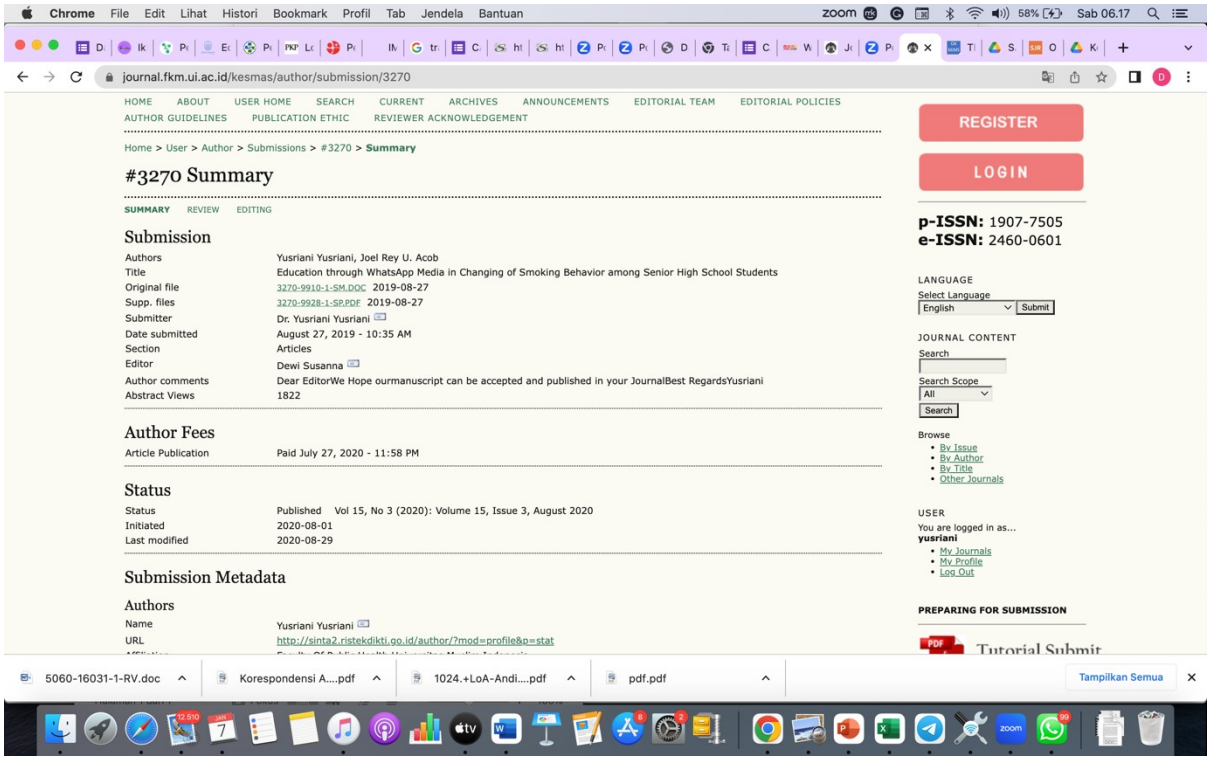
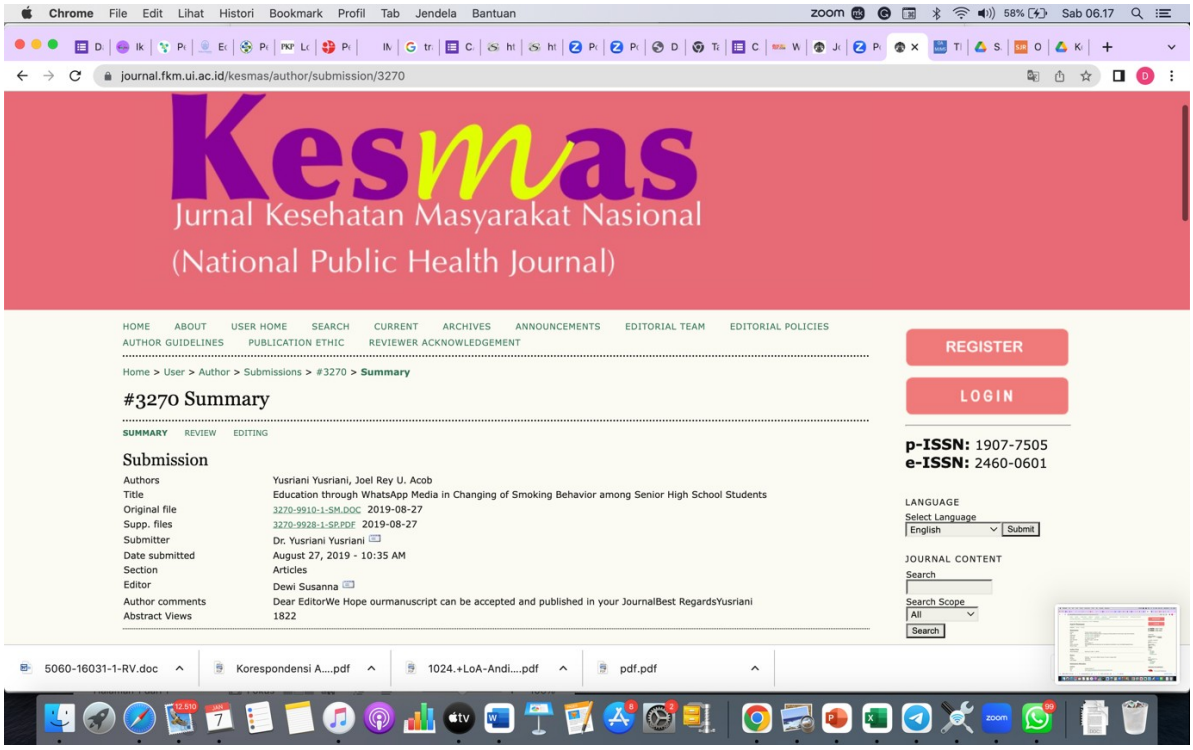
PROSES CORRESPONDENCE

SUBMISSION

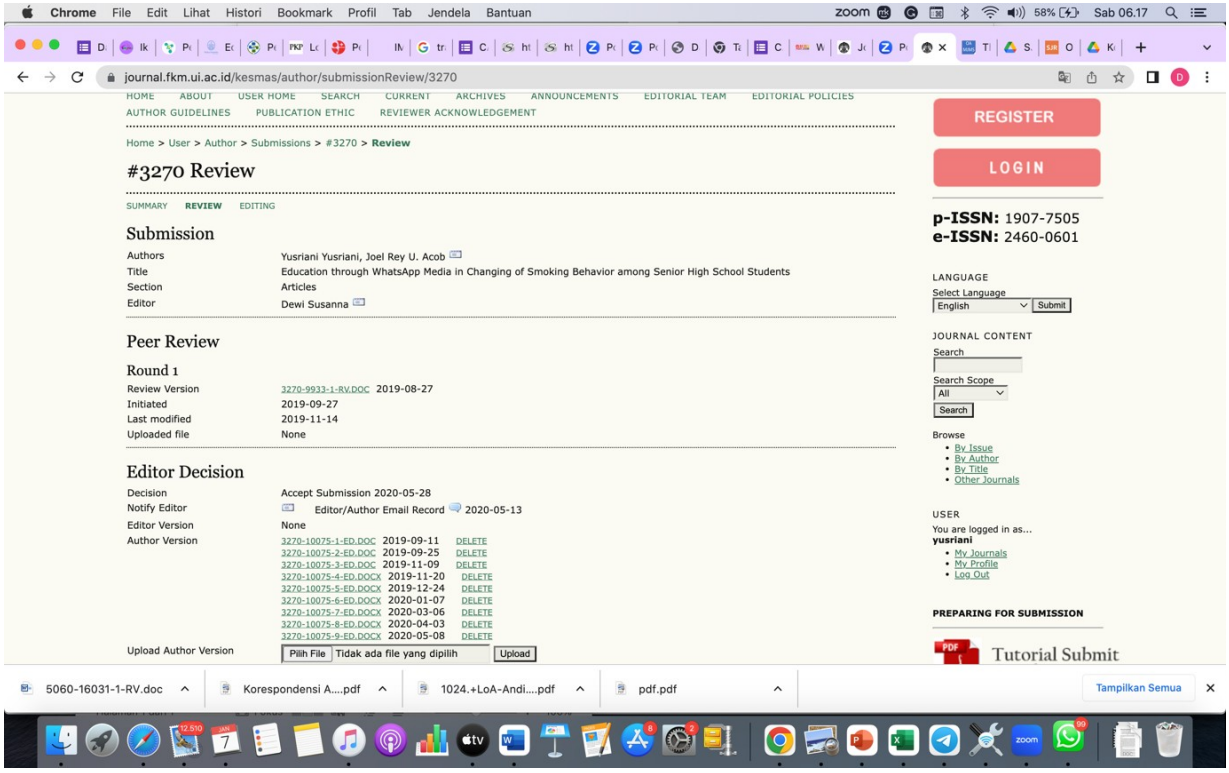


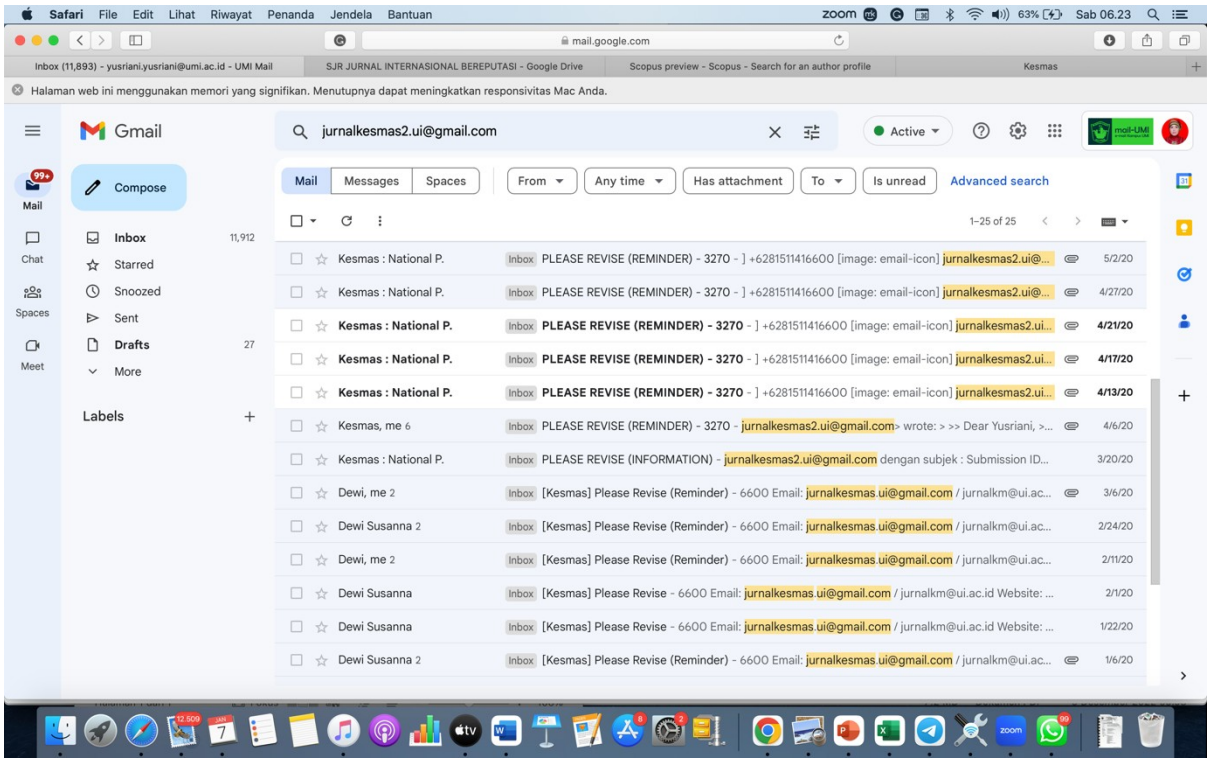


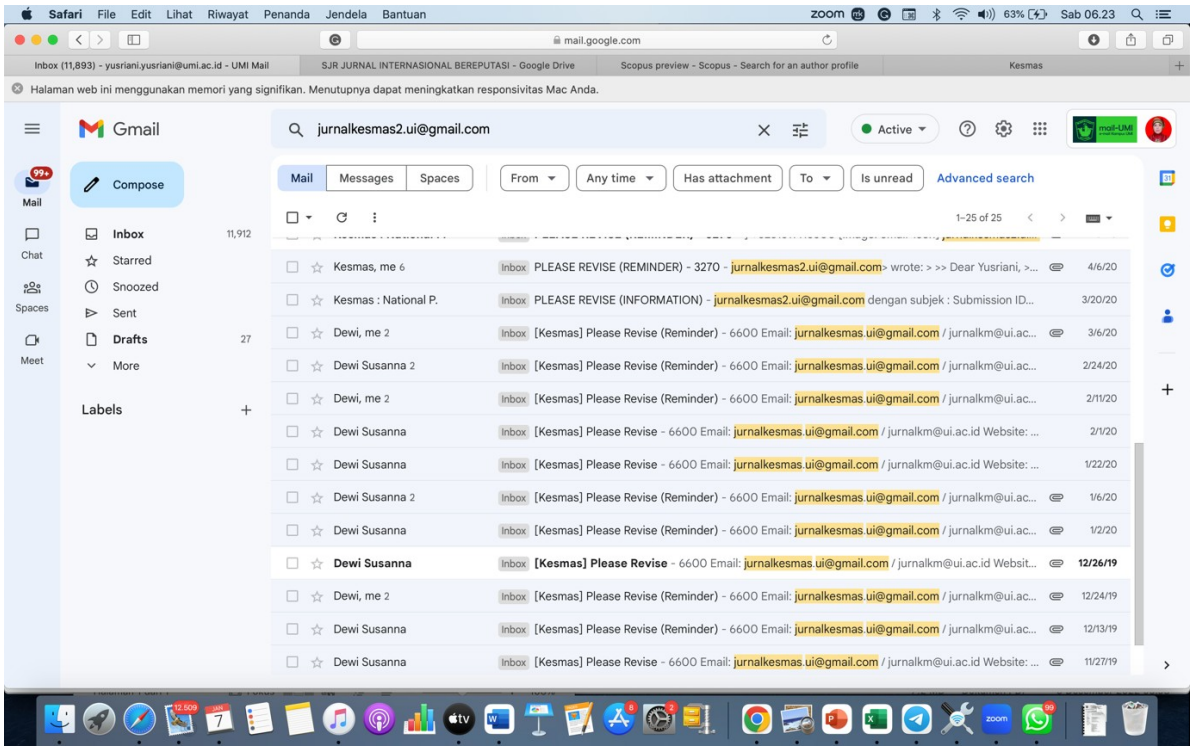

journal.fkm.ui.ac.id/kesmas/author/submission/3270
HOME ABOUT USER HOME SEARCH CURRENT ARCHIVES ANNOUNCEMENTS EDITORIAL TEAM EDITORIAL POLICIES
AUTHOR GUIDELINES PUBLICATION ETHIC REVIEWER ACKNOWLEDGEMENT
Home > User > Author > Submissions > #3270 > Summary
#3270 Summary
SUMMARY REVIEW EDITING
Submission
Authors Yusriani Yusriani, Joel Rey U. Acob
Title Education through WhatsApp Media in Changing of Smoking Behavior among Senior High School Students
Original file 3270-9910-1-SM.DOC 2019-08-27
Supp. files 3270-9928-1-SP.PDF 2019-08-27
Submitter Dr. Yusriani Yusriani
Date submitted August 27, 2019 - 10:35 AM
Section Articles
Editor Dewi Susanna
Author comments Dear EditorWe Hope ourmanuscript can be accepted and published in your JournalBest RegardsYusriani
Abstract Views 1822
Author Fees
Article Publication Paid July 27, 2020 - 11:58 PM
Status
Status Published Vol 15, No 3 (2020): Volume 15, Issue 3, August 2020
Initiated 2020-08-01
Last modified 2020-08-29
Submission Metadata
Authors
Name Yusriani Yusriani
URL http://sinta2.ristekdikti.go.id/author/?mod=profile&p=stat
REGISTER
LOGIN
p-ISSN: 1907-7505
e-ISSN: 2460-0601
LANGUAGE
Select Language
English Submit
JOURNAL CONTENT
Search
Search Scope
All
Search
Browse
By Issue
By Author
By Title
Other Journals
USER
You are logged in as...
yusriani
My Journals
My Profile
Log Out
PREPARING FOR SUBMISSION
Tutorial Submit
5060-16031-1-RV.doc
Korespondensi A....pdf
1024.+LoA-Andi....pdf
pdf.pdf
Tampilkan Semua

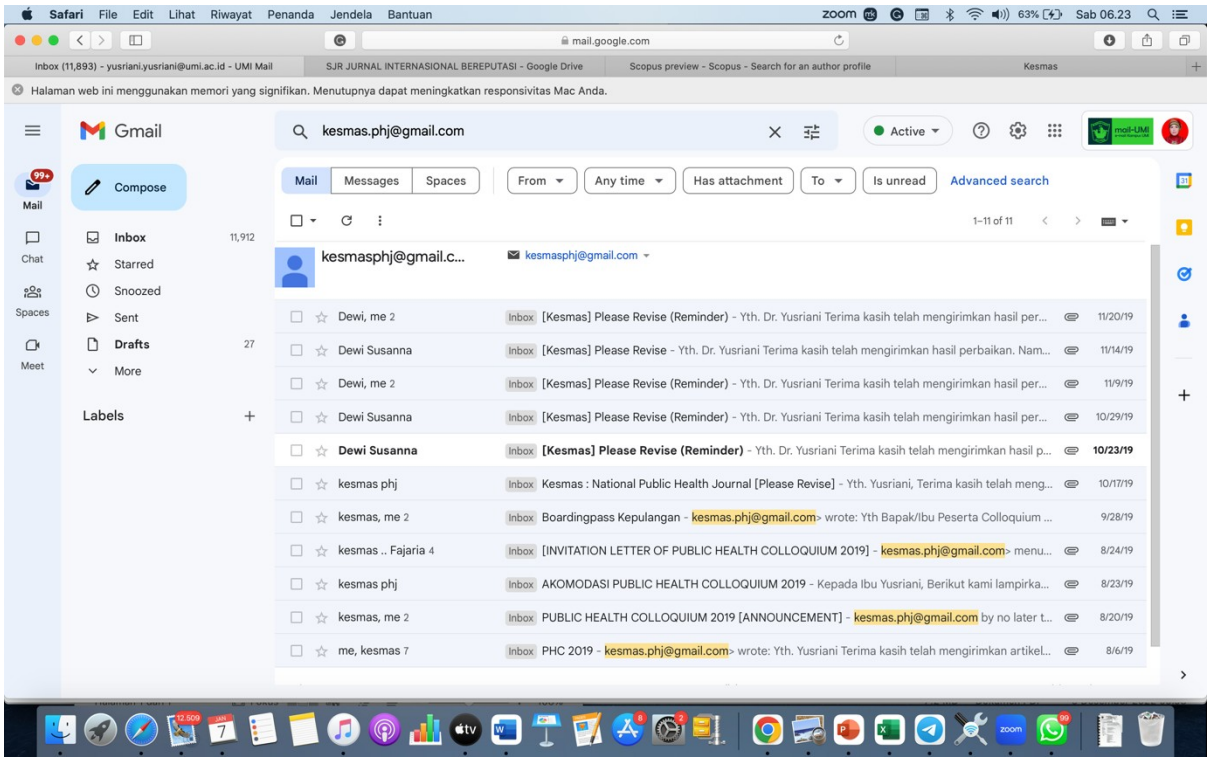

journal.fkm.ui.ac.id/kesmas/author/submission/3270
Kesmas
Jurnal Kesehatan Masyarakat Nasional
(National Public Health Journal)
HOME ABOUT USER HOME SEARCH CURRENT ARCHIVES ANNOUNCEMENTS EDITORIAL TEAM EDITORIAL POLICIES
AUTHOR GUIDELINES PUBLICATION ETHIC REVIEWER ACKNOWLEDGEMENT
Home > User > Author > Submissions > #3270 > Summary
#3270 Summary
SUMMARY REVIEW EDITING
Submission
Authors Yusriani Yusriani, Joel Rey U. Acob
Title Education through WhatsApp Media in Changing of Smoking Behavior among Senior High School Students
Original file 3270-9910-1-SM.DOC 2019-08-27
Supp. files 3270-9928-1-SP.PDF 2019-08-27
Submitter Dr. Yusriani Yusriani
Date submitted August 27, 2019 - 10:35 AM
Section Articles
Editor Dewi Susanna
Author comments Dear EditorWe Hope ourmanuscript can be accepted and published in your JournalBest RegardsYusriani
Abstract Views 1822
REGISTER
LOGIN
p-ISSN: 1907-7505
e-ISSN: 2460-0601
LANGUAGE
Select Language
English Submit
JOURNAL CONTENT
Search
Search Scope
All
Search
5060-16031-1-RV.doc
Korespondensi A....pdf
1024.+LoA-Andi....pdf
pdf.pdf

REVIEW


journal.fkm.ui.ac.id/kesmas/author/submissionReview/3270
HOME ABOUT USER HOME SEARCH CURRENT ARCHIVES ANNOUNCEMENTS EDITORIAL TEAM EDITORIAL POLICIES
AUTHOR GUIDELINES PUBLICATION ETHIC REVIEWER ACKNOWLEDGEMENT
Home > User > Author > Submissions > #3270 > Review
#3270 Review
SUMMARY REVIEW EDITING
Submission
Authors Yusriani Yusriani, Joel Rey U. Acob
Title Education through WhatsApp Media in Changing of Smoking Behavior among Senior High School Students
Section Articles
Editor Dewi Susanna
Peer Review
Round 1
Review Version 3270-9933-1-RV.DOC 2019-08-27
Initiated 2019-09-27
Last modified 2019-11-14
Uploaded file None
Editor Decision
Decision Accept Submission 2020-05-28
Notify Editor Editor/Author Email Record 2020-05-13
Editor Version None
Author Version
3270-10075-1-ED.DOC 2019-09-11 DELETE
3270-10075-2-ED.DOC 2019-09-25 DELETE
3270-10075-3-ED.DOC 2019-11-09 DELETE
3270-10075-4-ED.DOCX 2019-11-20 DELETE
3270-10075-5-ED.DOCX 2019-12-24 DELETE
3270-10075-6-ED.DOCX 2020-01-07 DELETE
3270-10075-7-ED.DOCX 2020-03-06 DELETE
3270-10075-8-ED.DOCX 2020-04-03 DELETE
3270-10075-9-ED.DOCX 2020-05-08 DELETE
Upload Author Version Pilih File Tidak ada file yang dipilih Upload
REGISTER
LOGIN
p-ISSN: 1907-7505
e-ISSN: 2460-0601
LANGUAGE
Select Language English Submit
JOURNAL CONTENT
Search
Search Scope All Search
Browse
By Issue
By Author
By Title
Other Journals
USER
You are logged in as...
yusriani
My Journals
My Profile
Log Out
PREPARING FOR SUBMISSION
Tutorial Submit
5060-16031-1-RV.doc
Korespondensi A....pdf
1024.+LoA-Andi....pdf
pdf.pdf
Tampilkan Semua

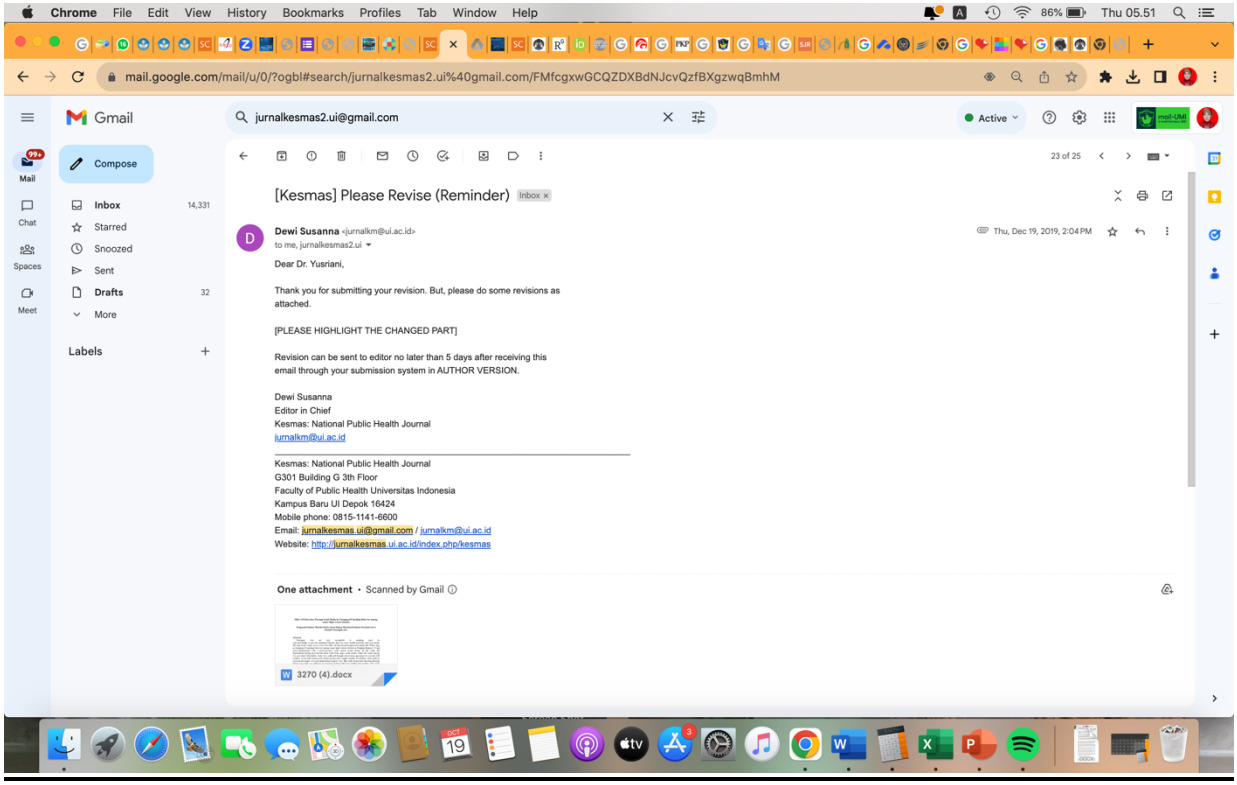

mail.google.com
Inbox (11,893) - yusriani.yusriani@umi.ac.id - UMI Mail
SJR JURNAL INTERNASIONAL BEREPUTASI - Google Drive
Scopus preview - Scopus - Search for an author profile
Kesmas
Halaman web ini menggunakan memori yang signifikan. Menutupnya dapat meningkatkan responsivitas Mac Anda.
Gmail
jurnalkesmas2.ui@gmail.com
Active
Compose
Inbox 11,912
Starred
Snoozed
Sent
Drafts 27
More
Labels
Mail Messages Spaces From Any time Has attachment To Is unread Advanced search
1–25 of 25
Kesmas : National P. Inbox PLEASE REVISE (REMINDER) - 3270 -] +6281511416600 [image: email-icon] jurnalkesmas2.ui@... 5/2/20
Kesmas : National P. Inbox PLEASE REVISE (REMINDER) - 3270 -] +6281511416600 [image: email-icon] jurnalkesmas2.ui@... 4/27/20
Kesmas : National P. Inbox PLEASE REVISE (REMINDER) - 3270 -] +6281511416600 [image: email-icon] jurnalkesmas2.ui... 4/21/20
Kesmas : National P. Inbox PLEASE REVISE (REMINDER) - 3270 -] +6281511416600 [image: email-icon] jurnalkesmas2.ui... 4/17/20
Kesmas : National P. Inbox PLEASE REVISE (REMINDER) - 3270 -] +6281511416600 [image: email-icon] jurnalkesmas2.ui... 4/13/20
Kesmas, me 6 Inbox PLEASE REVISE (REMINDER) - 3270 - jurnalkesmas2.ui@gmail.com> wrote: > >> Dear Yusriani, >... 4/6/20
Kesmas : National P. Inbox PLEASE REVISE (INFORMATION) - jurnalkesmas2.ui@gmail.com dengan subjek : Submission ID... 3/20/20
Dewi, me 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 3/6/20
Dewi Susanna 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 2/24/20
Dewi, me 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 2/11/20
Dewi Susanna Inbox [Kesmas] Please Revise - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id Website: ... 2/1/20
Dewi Susanna Inbox [Kesmas] Please Revise - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id Website: ... 1/22/20
Dewi Susanna 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 1/6/20

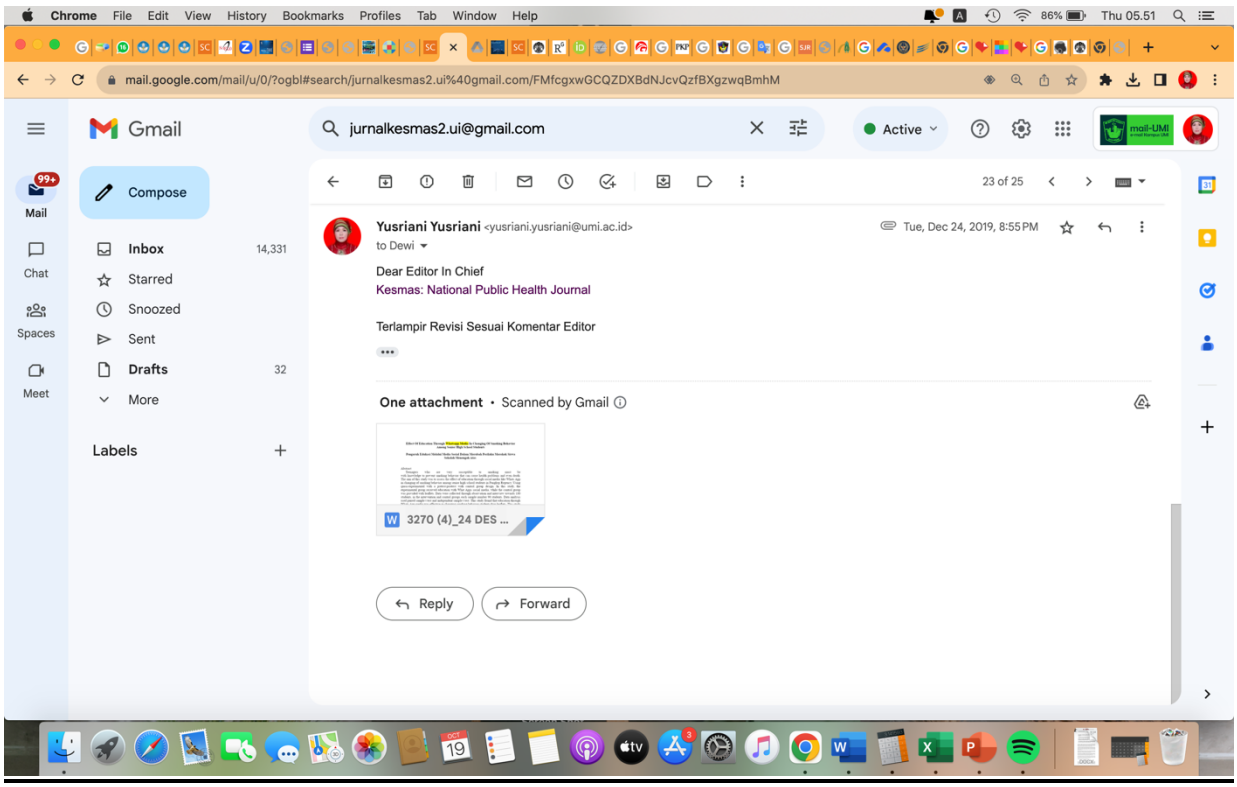

Safari File Edit Lihat Riwayat Penanda Jendela Bantuan
mail.google.com
Halaman web ini menggunakan memori yang signifikan. Menutupnya dapat meningkatkan responsivitas Mac Anda.
Gmail
jurnalkesmas2.ui@gmail.com
Compose
Inbox 11,912
Starred
Snoozed
Sent
Drafts 27
More
Labels
Mail Messages Spaces From Any time Has attachment To Is unread Advanced search
1–25 of 25
Kesmas, me 6 Inbox PLEASE REVISE (REMINDER) - 3270 - jurnalkesmas2.ui@gmail.com> wrote: > >> Dear Yusriani, >... 4/6/20
Kesmas : National P. Inbox PLEASE REVISE (INFORMATION) - jurnalkesmas2.ui@gmail.com dengan subjek : Submission ID... 3/20/20
Dewi, me 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 3/6/20
Dewi Susanna 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 2/24/20
Dewi, me 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 2/11/20
Dewi Susanna Inbox [Kesmas] Please Revise - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id Website: ... 2/1/20
Dewi Susanna Inbox [Kesmas] Please Revise - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id Website: ... 1/22/20
Dewi Susanna 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 1/6/20
Dewi Susanna Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 1/2/20
Dewi Susanna Inbox [Kesmas] Please Revise - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id Websit... 12/26/19
Dewi, me 2 Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 12/24/19
Dewi Susanna Inbox [Kesmas] Please Revise (Reminder) - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac... 12/13/19
Dewi Susanna Inbox [Kesmas] Please Revise - 6600 Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id Website: ... 11/27/19


Safari File Edit Lihat Riwayat Penanda Jendela Bantuan
mail.google.com
Halaman web ini menggunakan memori yang signifikan. Menutupnya dapat meningkatkan responsivitas Mac Anda.
Gmail
kesmas.phj@gmail.com
Compose
Inbox 11,912
Starred
Snoozed
Sent
Drafts 27
More
Labels
Mail Messages Spaces From Any time Has attachment To Is unread Advanced search
1–11 of 11
kesmasphj@gmail.c...
kesmasphj@gmail.com
Dewi, me 2 Inbox [Kesmas] Please Revise (Reminder) - Yth. Dr. Yusriani Terima kasih telah mengirimkan hasil per... 11/20/19
Dewi Susanna Inbox [Kesmas] Please Revise - Yth. Dr. Yusriani Terima kasih telah mengirimkan hasil perbaikan. Nam... 11/14/19
Dewi, me 2 Inbox [Kesmas] Please Revise (Reminder) - Yth. Dr. Yusriani Terima kasih telah mengirimkan hasil per... 11/9/19
Dewi Susanna Inbox [Kesmas] Please Revise (Reminder) - Yth. Dr. Yusriani Terima kasih telah mengirimkan hasil per... 10/29/19
Dewi Susanna Inbox [Kesmas] Please Revise (Reminder) - Yth. Dr. Yusriani Terima kasih telah mengirimkan hasil p... 10/23/19
kesmas phj Inbox Kesmas : National Public Health Journal [Please Revise] - Yth. Yusriani, Terima kasih telah meng... 10/17/19
kesmas, me 2 Inbox Boardingpass Kepulangan - kesmas.phj@gmail.com> wrote: Yth Bapak/Ibu Peserta Colloquium ... 9/28/19
kesmas .. Fajaria 4 Inbox [INVITATION LETTER OF PUBLIC HEALTH COLLOQUIUM 2019] - kesmas.phj@gmail.com> menu... 8/24/19
kesmas phj Inbox AKOMODASI PUBLIC HEALTH COLLOQUIUM 2019 - Kepada Ibu Yusriani, Berikut kami lampirka... 8/23/19
kesmas, me 2 Inbox PUBLIC HEALTH COLLOQUIUM 2019 [ANNOUNCEMENT] - kesmas.phj@gmail.com by no later t... 8/20/19
me, kesmas 7 Inbox PHC 2019 - kesmas.phj@gmail.com> wrote: Yth. Yusriani Terima kasih telah mengirimkan artikel... 8/6/19

PROSE REVIEW

REVIEW 1





HASIL REVIEW SUBSTANSI "1"

Effect Of Education Through Social Media In Changing Of Smoking Behavior Among Senior High School Students

Pengaruh Edukasi Melalui Media Sosial Dalam Merubah Perilaku Merokok Siswa Sekolah Menengah Atas

Commented [j1]: Kalau ini sosial media yang digunakan hanya Whatsapp, silahkan langsung ditulis Whatsapp saja.

Abstract

Teenagers who are very susceptible to smoking must be with knowledge to prevent smoking behavior that can cause health problems and even death. The aim of this study was to assess the effect of education through social media like Whats App in changing of smoking behavior among senior high school students in Pangkep Regency. Using quasi-experimental with a pretest-posttest with control group design. In this study, the experimental group received education with What Apps social media, while the control group was provided with leaflets. Data were collected through observation and interview towards 180 students, in the intervention and control groups each sample number 90 students. Data analysis used paired sample t test and independent sample t test. This study found that education through Whats App media was effective in changing smoking behavior students than leaflets. This study suggested to disseminate health information with whats app about the dangers of smoking to teenagers in order to reduce and stop smoking.

Keywords: Behavior, smoking, Whats App, leaflets, students.

Introduction

Commented [j2]: Gap analisis belum jelas.

Teenagers who are the younger generation who will determine the fate of the nation in the future. A quality generation is absolutely necessary, despite in reality social change and a more modern lifestyle in the society tend to also increase various problems in the life of the younger generation. This is due to teenagers experiencing a transition period where they always want to try various things that are considered modern and do not want to miss, an easily affected and want to appear and be accepted in their environment. Many of these behaviors can bring risks to health such as smoking, drinking alcoholic beverages, drugs or premarital sexual behavior. Adolescents who are the next generation of nation-building who must be prepared as well as possible, an related to that various problems, especially during high school age that are very vulnerable to behaviors such as smoking and drinking. They must be equipped with knowledge and change their attitudes to be able to prevent risky and avoid bad impact towards their health and future.[1]

Research conducted by Kusumawardani (2015), about health risk behaviors among middle and high school students in Indonesia found that the main risk behaviors that bring about health problems for the middle and high school students were smoking, breakfast, physical violence and alcohol consumption.[2] Fatin (2011) at the Surakarta Vocational School who stated effects of health education on the dangers of smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, stop smoking habits and avoid smoking, health education is needed. Health education achieve goals through changes in adolescent behavior.[3]

Based on WHO data in 2016 the percentage of smokers in ASEAN countries for Indonesia (46.16%), Philippines (16.62%), Vietnam (14.11%), Myanmar (8.73%), Thailand (7.74%), Malaysia (2.9%), Cambodia (2.07%), Laos (1.23%), Singapore (0.39%), and Brunei (0.04%).[4]

Commented [j3]: 1 paragraf terdiri dari minimal 3 kalimat

In Indonesia, smoking is one of the habits of the community because the smoking prevalence rate tends to remain high, especially in men. In this case the government including the Ministry of Health together with other relevant ministries has sought to be able to control this smoking habit through various strategies and approaches. Government policy for tobacco control has been outlined in Government Regulation No. 109 of 2013. In the Government Regulation it clearly regulates cigarette advertisements, areas without cigarettes, and access to cigarettes to vulnerable groups in the community. In addition, the Ministry of Health in collaboration with related sectors has also implemented smoking prevention efforts, through smoking cessation programs and providing health education on the dangers of smoking, as well as other approaches at the community level, public facilities, schools, workplaces and groups. other populations.[5]

Based on data from the Central Bureau of Statistics of Pangkajene Kepulauan Regency in 2017 which consists of land and several islands that the population of Pangkajene Kepulauan Regency is 353,428 people with the number of adolescents aged 11-21 years around 35% of the population.[6]

Based on the initial survey by distributing questionnaires to grade 2 students as many as 100 people at the Muhammadiyah Bungoro Public High School and 100 people at Pangkajene DDI Senior High School in Pangkep District who were present at the Muhammadiyah Bungoro High School were 85 students who had smoking habits, as many as 60 students smoked spend one pack (12 sticks) every day and 25 students spend 6 cigarettes a day, 57 students usually smoke in school and 28 only smoke outside the school environment. Based on the supporting data obtained from the Counseling Guidance teacher during the last 3 months (June-August) that there were 47 students who committed school violations by smoking in the school environment. While in Pangkajene DDI Senior High School there were 93 students who had smoking habits, 53 students spent one pack (12 sticks) every day and 40 students spent 6 cigarettes per day, 60 students used to smoke in school and 33 only smoke outside the school. Based on the supporting data obtained from the Counseling Guidance teacher during the last 3 months (June-August) that there were 43 students who committed school violations by smoking in the school environment.

Smoking behavior generally occurs in high schools both public and private, and based on the results of the data obtained that smoking is more common in Private High Schools including Bungoro Muhammadiyah Senior High School and Pangkajene DDI Senior High School, Pangkep Regency as a place chosen by researchers to provide education for students who have a habit of smoking through WhatsApp media or leaflets. So, the aim of this study was to assess the effect of education through the Whats App media on changes in smoking behavior in senior high school students in Pangkep Regency.

Commented [j4]: 1 paragraf terdiri dari minimal 3 kalimat

Commented [j5]: 1 paragraf terdiri dari 1 topik

Commented [j6]: Mengapa meneliti sekolah di Pangkep Regency? Jelaskan.

Commented [j7]: Bagaimana dengan hal ini? Mengapa tidak representatif?

Method

The type of research used is quasi-experiment with a pretest-posttest design only control group design which is a study that determines the treatment (intervention) in the experimental group by comparing with the control group.[7,8] In this study, the experimental group received education with What Apps social media, while the control group was given education with leaflet media. Before the intervention, the pretest was performed in both groups. After giving the intervention, posttest was then carried out. This study uses questionnaires, a data collection techniques that are carried out by giving a set of questions or statements written to the respondent to answer by sharing with each respondent at the pretest and posttest. The population in this study were 330 grade 2 students enrolled in the Muhammadiyah Bungoro High School and Pangkajen DDI High School in Pangkep Regency. Data were collected through observation and interview to 180 respondents. The respondents in the control group were 90 and in the intervention group 90 students.

Selection of respondents used purposive sampling method based on the criteria of inclusion and exclusion. The inclusion criteria are criteria or standards set before the study that are used to determine whether a person can participate in a research study. The inclusion criteria used in this study are as follows: Class 2 male students who were registered and actively participated in learning in the last three months at the Muhammadiyah Bungoro and DDI Pangkajene High Schools in Pangkep Regency, Students who have Mobile phone and Whats App, Students who are willing became the respondent in this study by answering questions in the questionnaire and filling observation sheet. Exclusion criteria or exclusion criteria are criteria set before the study used to determine whether to participate or must be excluded. Data analysis paired sample t test and independent sample t test, because the data were normally distributed.

To simplify the research process, the researcher presents a series of activities during the research process, in the preparation Phase by determining and making research schedules, determining research assistants and preparing the material to be delivered. Consists of understanding towards cigarettes, hazardous substances and the dangers posed by cigarettes both for health and economic aspects and the impact on passive smoking. In the implementation phase, the initial stages of the implementation, is first open the greeting, do the introductory stage, open the class with prayers led by the class leader, and attend the attendees and those who are unable to attend, and the researcher explains the purpose of arrival, purpose, topic and

description about the material that will be brought.

Steps for Health Education through the Media Whats App, are preparing material and supporting media. This material can be short messages, pictures or videos that contain invitations and appeals, provide pre-test, explain the purpose and topic of the meeting to the respondent, save student cellphone numbers become a sample (respondent), Create a Whats App group which is named the Respondent of SMKS Muhammadiyah Bungoro, Share health information in the form of health messages in the form of narrative texts, posters, pictures, or in audiovisual forms related to cigarette material. Performed for 1 week given at day and night regularly every day. At the final stage, is to do the post test by distributing the same questionnaire during the pre-test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after the health education intervention is given through the media Whats App.

Educational steps through Leaflet media are component preparing material and supporting media, providing pre-test, explaining the purpose and topic of the meeting to the respondent, distributing leaflets to each respondent with the help of research assistants and ensuring leaflets are evenly distributed, reciting the contents of the leaflets has been distributed and suggested to the respondent to listen and pay attention to the contents of the leaflet, recommend to the respondent to understand the contents of the leaflet and hope for changes in knowledge, attitudes and behavior after reading the leflet. The final stage is to perform the post test by distributing the same questionnaire during the pre test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after health education interventions are provided through leaflet media.

The Final Stage of this Implementation is to evaluate the results by checking respondents' answers, scoring data, tabulating research data and concluding how the level of knowledge, attitudes and behavior of students before and after being given health education through media Whats App and Leaflets.

This study has been approved by the Health Research Ethics Commission of the Universitas Muslim Indonesia and the Ibnu Sina Hospital YW-UMI Makassar Number: 058/A.1/KEPK-UMI/V/2018.

Results

To simplify the research process, the researcher presents a series of activities during the research process, namely:

Preparation Stage consists of (1) Determine and schedule research. (2) Determine research assistants according to predetermined requirements, namely those who know about the condition of students and the school environment under study, namely one of the school teachers who teach in the school under study. (3) Prepare material to be brought. (4) Prepare leaflets about the dangers of smoking. Preparing material in the form of theories, pictures and visual audio about smoking risk behavior which consists of: the understanding of cigarettes, the content of harmful substances of cigarettes and the dangers arising from smoking both for health and economic aspects and the impact for passive smokers.

Implementation phase: In the initial stages of the implementation, first opening with greetings, introducing the stage, opening the class with a prayer led by the class leader, and attend both attendees and those unable to attend, and researchers explain the purpose of arrival, goals, topics and a description of material to be brought.

Steps to Health Education through Whats App Media consists of: (1) Prepare material and supporting media. Material that will be given to respondents is material about cigarettes, namely: the content of hazardous substances from cigarettes, the dangers that will arise from smoking habits in terms of health, economy and environmental impact and people around it. This material can be in the form of short messages, pictures or videos that contain the meaning of solicitation and appeal. (2) Give a pre test, Distribute questionnaires to each respondent to determine the level of knowledge and attitudes of respondents before being given education through the Whats App media. Respondents were given the opportunity to fill out questionnaires

Commented [j8]: Jelaskan di latar belakang.

Commented [j9]: How?

Commented [j10]: How? Jelaskan lebih lanjut.

Commented [j11]: Ini metode atau hasil? Kalau hasil, harus dituliskan di bagian tujuan dan metode. Apa yang ditulis di hasil mohon dijelaskan di metode.

within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents. The purpose of this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes in terms of health, economic losses, and impacts on the social environment. (4) Save the handphone number of the student who is the sample (respondent). (5) Create a Whats App group named Muhammadiyah Bungoro SMKS Respondents and Pangkajene DDI SMAS Respondents. (6) Share health information in the form of health messages like in the form of narrative texts, posters, pictures, or in the form of audiovisual related material cigarettes. Performed for 1 week given at the time of the day and night on a regular basis every day. (7) Evaluation. The final stage is to conduct a post test by distributing the same questionnaire during the pre test in order to find out if there are changes in students' knowledge and attitudes before and after they are given health education interventions through the Whats App media.

Educational steps through the Leaflet media consists of: (1) Prepare material and supporting media. Prepare leaflets containing material about cigarettes. The material to be given to respondents is material about cigarettes, namely: the content of hazardous substances from cigarettes, the danger that will arise from smoking habits in terms of health, economic and social. (2) Give a pre test. Distribute questionnaires to each respondent to find out the level of knowledge and attitudes of respondents before being given education through the Leaflet media. Respondents were given the opportunity to fill out questionnaires within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents The purpose of carrying out this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes both in terms of health, economic losses, and impacts on the social environment. (4) Distribute leaflets to each respondent with the help of research assistants and ensure the leaflets are evenly distributed. (5) Read back the contents of the leaflet that has been distributed and encourage respondents to listen and pay attention to the contents of the leaflet. (6) Encourage respondents to understand the contents of the leaflet and hope for a change in knowledge and attitudes after reading the leflet. (7) Encourage respondents to bring back the leaflets that were distributed one week later at the time of the evaluation. (8) Evaluation. The final stage is to do a post test by distributing the same questionnaire at the time of the pre test with the aim to find out if there are changes in students' knowledge and attitudes before and after the health education intervention is given through leaflet media.

The Final Stage of the Implementation is to evaluate the results of check the respondent's answer, perform data scoring, tabulate research data and see and conclude how the level of knowledge and attitudes of adolescents before and after being given health education through the Whats App and Leaflet media.

Results of this study were obtained through primary data using a questionnaire. Processing data using the computer statistic program. Data analysis results are displayed in the following tables:

Table1. Distribution of Respondents Based on Knowledge Levels, Attitudes and Smoking Behaviors of High School Students When Pre Test and Post Test With Education Through Media WhatsApp and Leafletsin Pangkep Regency

Variable	Whats App (n=90)				Leaflet (n=90)			
	Pre test		Post test		Pre test		Post test	
	N	%	n	%	n	%	n	%
Knowledge								
Good	42	46.67	88	97.78	41	45.56	77	85.55
Less	48	53.33	2	2.22	48	54.44	13	14.45

Commented [j12]: Bagaimana tahapannya memperoleh hasil ini? Harus ada tahapannya di metode

Commented [j13]: p-Value?

Commented [j14]: Variabel ini belum dijelaskan di metode (good, less, positive, negative, dll)

Commented [j15]: n?

Variable	Whats App (n=90)				Leaflet (n=90)			
	Pre test		Post test		Pre test		Post test	
	N	%	n	%	n	%	n	%
Attitudes								
Positive	30	33.33	79	87.78	32	35.56	76	84.44
Negative	60	66.67	11	12.22	58	64.44	14	15.55
Behaviour								
Good	14	15.55	62	68.89	20	22.22	61	67.78
Less	76	84.44	28	31.11	70	77.78	29	32.22

Source :Primary Data 2018

Table 2. Distribution of Respondents Based onKnowledge Changes, Attitudes and Behavior About Cigarettes Before and After Intervention in Media Education WhatsUpp da Leaflet in Pangkep Regency

Variable changes about smoking	WhatsApp (n=90)		Leaflet (n=90)	
	N	%	N	%
Knowledge				
Increase	73	81.1	59	65.6
Decrease	9	10.0	18	20.0
Remain	8	8.9	13	14.4
Attitudes				
Increase	74	82.2	72	80.0
Decrease	14	15.6	14	15.6
Remain	2	2.2	4	4.4
Behaviour				
Increase	74	82.2	68	75.6
Decrease	13	14.4	18	20.0
Remain	3	3.4	4	4.4

Source :Primary Data 2018

Table 3. Education Through Media WhatsUpp and Leaflets on Average Knowledge, Attitudes and Behavior About Cigarettes in High School Students in Pangkep Regency

Variable about Cigarettes	Knowledge			Attitudes			Behaviour		
	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*
Leaflet	4,27±1,29	6,51±1,55	0,000	24,63±6,35	31,61±4,44	0,000	4,36±1,46	6,47±1,67	0,000
Whats App	4,33±1,37	5,80±0,87	0,000	24,38±5,40	32,22±3,38	0,000	4,82±1,84	5,80±0,87	0,000
p**	0,812	0,009		0,772	0,030		0,186	0,021	

***Source :Primary Data* 2018 *: Paired t Test **: Independen Sample t Test**

This researched showed that there are inputs/comments from the participating students related to the tobacco education content of WA and Leaflet. The comments from participating students related to the tobacco education content of WA were very varied, they were very enthusiastic and critical in giving comments. There are positive and negative comments because the material presented in whats apps varies in written and

Commented [j14]: Variabel ini belum dijelaskan di metode (good, less, positive, negative, dll)

Commented [j15]: n?

Commented [j16]: p-Value?

Commented [j17]: Jelaskan variabel ini di metode (increase, decease, remain, dll). Didapatkan berdasarkan apa. Disebut increase bila seperti apa.

Commented [j18]: n?

audiovisual form. Videos delivered via Whats App can be lived up to students more quickly. The ease of comprehension of the material contained in the video is due to the presentation of the video that "contains a storyline" for someone who starts smoking to the diseases he suffers. Students are able to empathize with the circumstances of the characters in the video story, so that their knowledge and attitudes about smoking will be better. Whereas The comments from the participating students related to the tobacco education content of the leaflet were very few and tended to be one-way, students simply read information in the leaflet and there was no response because the leaflet contained information that was packaged in writing without a video that was more tangible in sight and applied in everyday life.

Discussion

Commented [j19]: Diskusi masih belum fokus.
Mengapa memilih sosial media Whatsapp?
Bagaimana dengan leaflet?
Mohon jangan terlalu banyak mengulang hasil.

The intervention is haalth education using leaflets and Whats App. The material given to students is material about cigarettes, such as the content of harmful substances from cigarettes, the danger that will be caused by smoking habits both in terms of health, economy and environmental impact and the people around them.

Before the intervention about a half of the respondent had less knowledge about cigarettes were the WhatsApp group (53.33%) and the leaflet group (54.4%). After the educational intervention, more students had better knowledge about cigarettes, 88 students (97.78%) in the whatsapp group and 77 students (85.55%) in the leaflet group. Students knowledge about cigarettes are increased 59 or 65.6% through leaflet education, while through Whats App is 73 or 81.1%.

Paired t-test results show that giving education through leaflets or Whats App will increase students' knowledge, attitudes and actions about smoking. Increased knowledge, attitudes and actions about cigarettes more on students who received educational intervention by Whats App compared to leaflets. The use of WhatsApp media is more effective as a health education media compared to leaflet media in increasing knowledge. This is because whats app messages delivered are clearly written, two-way and can be read repeatedly, and equipped with sounds and images. In addition, students are easier to access if needed because students can open whats app every time. While in the leaflet media there is a tendency for students to only read the message once, and the leaflet is usually quickly lost, scattered cause the students cannot reread and understand more, besides the leaflets are one-way.

This study are in accordance with the study of Ambarwati (2014), who stated that video media is more effective in increasing students' knowledge about the dangers of smokingcompared to leaflets.[9] The same study also concluded that there was an influence of health education on knowledge about the dangers of smoking in adolescents.[10,11,12,13,14,15] In addition, some research results also concluded that with health education through social media about danger smoking has been shown to reduce cigarette consumption in adolescents.[16,17,18,19,20]

The results of this study are not in line with the research conducted by Ristin (2016), on the effectiveness of health promotion with leaflet and video media on adolescent knowledge indicating that adolescent knowledge is sufficient, a good attitude after receiving counseling about smoking behavior.[10.]

A study conducted by Fatin (2011) at the Surakarta Vocational School on the Effect of Health Education on cigarette smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, health education is expected to stop smoking habits and avoid smoking health education is needed to change their awareness or increase adolescent knowledge about health care and improvement. Health education in achieves goals among teenegers change process in adolescent behavior.[3]

Attitude and behavior is a collection of symptoms or sindroma in response to a stimulus or an object. It involves thoughts, feelings, attention, and other psychiatric symptoms. [21,22]

Changes that occur in the respondent as a result of exposure to messages and information conveyed through health education, namely in the form of changes in behavior and attitudes that begin with changes in individual knowledge. The higher the knowledge of individual attitudes the more positive and the lower the knowledge, the more negative the attitudes and behavior of individuals.[23,24]

This study showed that before the intervention many students had negative attitudes about smoking, 66.67% in the WhatsApp group and 64.4% in the leaflet group. After the educational

intervention, more students had positive attitude about smoking, 79 or 87.78% in the whatsapp group, and 76 or 84.44% in the leaflet group. Students who have a positive attitude about smoking increase through leaflet education are 68 people (75.6%), while through Whats App are 74 people (82.2%).

The attitude formation is influenced by several factors, such as physiological factors, experience factors, and social communication factors. A person's physiological factors will determine how a person behaves. Physiological factors related to age and health. Young people usually have a more free and courageous attitude compared to old age. People who are often sick or in sick condition will have an attitude that depends on others. Experience factors, a person's attitude will be influenced by the person's direct experience of the object of attitude. Factors of social communication, social communication can take the form of information from someone to another person who will influence attitudes.[25,26]

The result also showed that before the intervention students who had bad behavior about cigarettes in the WhatsApp group were 84.4% and in the leaflet group were 77.8%. After the educational intervention, more students had good behavior about cigarettes 62 or 68.89% in the whatsapp group, and 61 students or 67.78% in the leaflet group. Students who have good behavior about cigarettes increase by 75.6% or 68 people through leaflet education, while education for Whats App 82.2% or 74 people.

Paired t-test results show that giving education through leaflets or Whats App will improve students' attitudes about cigarettes ($p < 0.05$). Increased attitudes about cigarettes are more on respondents who received educational intervention by Whats App compared to leaflets. This is due to the material contained in the video via Whats App which can be more quickly appreciated by students. The ease of appreciation of the material contained in the video is caused by the presentation of a video that "contains the storyline" of someone who started smoking up to the diseases he suffered. The students are able to empathize with the circumstances of the characters in the story of the video. Than his attitude about smoking will be better while in the leaflet contains some "information about cigarettes and dangers that are packaged in a straightforward manner". The respondents get additional information and can improve their understanding of smoking and its dangers.

The research done by Dian L (2013) about Mobile-Based Video Learning Smooking Effect as an anti-smoking health education media, found that the use of the "smooking effect learning" video method was quite effective. The learning media used could be accessed by various groups easily via mobile phones.[14] These teenagers will be more interested in learning more from social media, that offer not only the sound but also the picture show.[27,28,29,30]

Conclusion

Education through WhatsApp social media is more effective than leaflet media in increasing the knowledge, attitudes and behavior of high school students about cigarettes. It is advised to disseminate health information with whats app, leaflets and other media about the dangers of smoking to teenagers in order to reduce and stop smoking.

Acknowledgment

We would like to thank all the respondents of this research in Pangkep district, especially to the local government of Pangkep in supporting this research. The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) fully thanks to Universitas Muslim Indonesia for the financial support for the research, authorship, and/or publication of this article by the name of Internal Research Grant Funding.

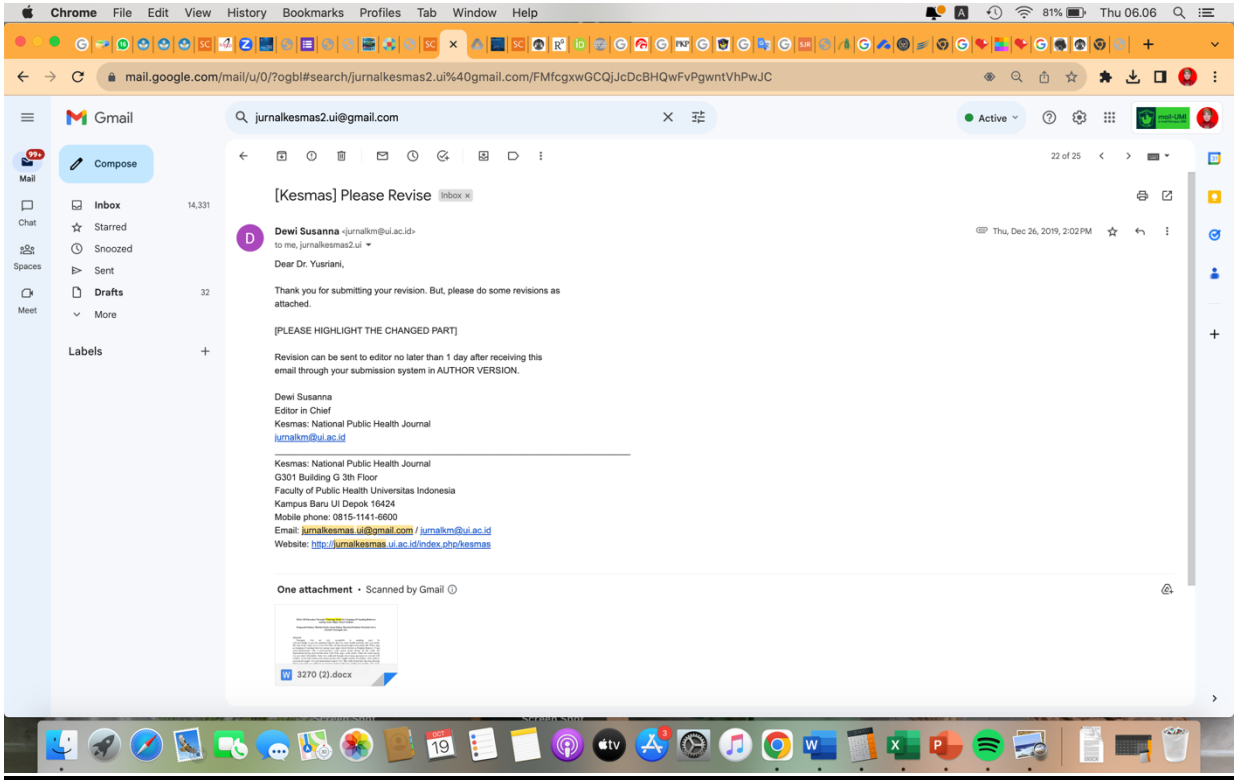
References

1. World Health Organization, Adolescent Development: Topics at Glance. WHO, 2015.
2. Kusumawardani, Health risk behaviors in middle and high school students. 2015.
3. Fatin, Influence of Health Education on cigarette smoking in adolescents in Surakarta. 2011.
4. Ministry of Health of The Republic of Indonesia, Data and information Center. t.t. Adolescent Reproductive Health Situation. 2017.
5. Balitbangkes, Agency for Health Research and Development on Cigarettes and Health.

2016.
6. Agency, C.S., Pangkep Regency Population Data 2017. 2017.
7. Aril, B.S.R., Quantitative Research Methodology. Mold I, 2017.
8. Saryono, Qualitative and Quantitative Research Methodology in the Field of Health. 2013.
9. al., A.e., Leaflets, Videos and Knowledge of Students on the Dangers of Smoking (Study of Students at SDN 78 Sabrang Lor Mojosongo Surakarta). 2014.
10. Ristin, E., Effectiveness of health promotion with leaflet and video media on adolescent knowledge. 2016.
11. Ma, S., Effect of adolescent smoking prevention programs: influence of smoking prevention programs among public high school students in the city of Paranaque, Fhilipinja Soulivanh. 2010: National Public Health Institute, Japan.
12. Andrian, L., Effect of Mass Media, Family, and Friends on Youth Smoking Behavior in Yogyakarta. Makara Hubs-Asia, 2014,18 (1): 41-52 DOI: 10.7454 / mssh.v18il.3460. 2014.
13. R, K., Factors Associated with Smoking Behavior at Home in Jorong Ganting Ateh Nagari Tantung Alam Community. STIKES Prima Nusantara Health Journal Bukit Tinggi, 2014. 6.
14. Dian, L., about Mobile Based Video Learning Smooking Effect as an anti-smoking health education media. 2013.
15. Kaplan, A.M.M.H., "Users of The World, unite! “Challenges and opportunities of Social Media”. Business Horizons 53, 2010. 1: p. 59-68.
16. Yoo W, C.D., Park K, The effects of SNS communication: How to express and accept MERS-preventive behavioral intentions in South Korea. Computers in Human Behavior. 2016; 62: 34–43. doi: 10.1016 / j.chb.2016.03.058.
17. JE, C., Antismoking campaign videos on YouTube and audience response: Application of social media assessment metrics. Computers in Human Behavior. 2015; 51: 114–121. doi: 10.1016 / j.chb.2015.04.061.
18. Cunningham JA, S.P., Implications of the fallacy in young adult smokers aged 19-24 years. American Journal of Public Health, 2017. 97(8): p. 1399–1400.
19. De Viron S, S.L., Brand A, Van Oyen H, Communicating genetics and smoking through social media. Journal of Medical Internet Research, 2013. 15(9): p. 198.
20. Depue JB, S.B., Betzner AE, Walsh BM, Encoded exposure to tobacco use in social media predicts subsequent smoking behavior. American Journal of Health Promotion, 2015. 29(4): p. 259-261.
21. I, A., From intentions to actions: A theory of planned behavior. In: Kuhl J, Beckman J, editors. Action-control: From cognition to behavior. Heidelberg, Germany: Springer; 2015. pp. 11–39.
22. Ajzen I, F.M., Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall, 2009.
23. A, B., Social cognitive theory of mass communication. Media Psychology, 2011. 3(3): p. 265–299.
24. Bernhard U, D.M., Vowe G, Do presumed online media effects have influence on online activities of politicians? Policy & Internet. . 2015. 8(1): p. 72-90.
25. Yusriani, Yusriani, and Muhammad Khidri Alwi. “Buku ajar promosi kesehatan dan pemberdayaan masyarakat.” (2018): 1-59.
26. Murphy-Hoefer R, H.A., Rivard C, The influence of tobacco countmarking ads on college students’ knowledge, attitudes, and beliefs. Journal of American College Health, 2010. 58(4): p. 373-381.
27. Paek HJ, G.A., McLeod DM, Hove T, How adolescents’ perceived influence media on peers affects smoking decisions. Journal of Consumer Affairs, 2011. 45(1): p. 123-126.
28. Yusriani, Yusriani., Effective audio visual aids change the behavior of elementary school students in maintaining dental Publication Name : Indian Journal of Public Health Research and Development, 2019. 10 (3) p. 584-588.
29. Shmueli D, P.J., Glantz SA, The effect of smoking is a randomized controlled study. American Journal of Preventive Medicine, 2010. 38(4): p. 351–358.
30. J, P., Participating in health issue-specific social networking sites to quit smoking: How

does social interconnection influence smoking cessation self-efficacy? Journal of Communication, 2013. 63: p. 933-952.

REVIEW 2


Chrome File Edit View History Bookmarks Profiles Tab Window Help
mail.google.com/mail/u/0/?ogbl#search/jurnalkesmas2.ui%40gmail.com/FMfcgxwGCQjJcDcBHQwFvPgwntVhPwJC
Gmail
jurnalkesmas2.ui@gmail.com
Active
Compose
Inbox 14,331
Starred
Snoozed
Sent
Drafts 32
More
Labels
[Kesmas] Please Revise
Dewi Susanna <jurnalkm@ui.ac.id>
to me, jurnalkesmas2.ui
Thu, Dec 26, 2019, 2:02 PM
Dear Dr. Yusriani,
Thank you for submitting your revision. But, please do some revisions as attached.
[PLEASE HIGHLIGHT THE CHANGED PART]
Revision can be sent to editor no later than 1 day after receiving this email through your submission system in AUTHOR VERSION.
Dewi Susanna
Editor in Chief
Kesmas: National Public Health Journal
jurnalkm@ui.ac.id
Kesmas: National Public Health Journal
G301 Building G 3th Floor
Faculty of Public Health Universitas Indonesia
Kampus Baru UI Depok 16424
Mobile phone: 0815-1141-6600
Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id
Website: http://jurnalkesmas.ui.ac.id/index.php/kesmas
One attachment • Scanned by Gmail
3270 (2).docx

HASIL REVIEW SUBSTANSI "2"

Effect Of Education Through Whatsapp Media In Changing Of Smoking Behavior Among Senior High School Students

Pengaruh Edukasi Melalui Media Sosial Dalam Merubah Perilaku Merokok Siswa Sekolah Menengah Atas

Abstract

Teenagers who are very susceptible to smoking must be with knowledge to prevent smoking behavior that can cause health problems and even death. The aim of this study was to assess the effect of education through social media like Whats App in changing of smoking behavior among senior high school students in Pangkep Regency. Using quasi-experimental with a pretest-posttest with control group design. In this study, the experimental group received education with What Apps social media, while the control group was provided with leaflets. Data were collected through observation and interview towards 180 students, in the intervention and control groups each sample number 90 students. Data analysis used paired sample t test and independent sample t test. This study found that education through Whats App media was effective in changing smoking behavior students than leaflets. This study suggested to disseminate health information with whats app about the dangers of smoking to teenagers in order to reduce and stop smoking.

Keywords: Behavior, smoking, whatsapp, leaflets, students.

Introduction

Teenagers who are the younger generation who will determine the fate of the nation in the future. A quality generation is absolutely necessary, despite in reality social change and a more modern lifestyle in the society tend to also increase various problems in the life of the younger generation. This is due to teenagers experiencing a transition period where they always want to try various things that are considered modern and do not want to miss, an easily affected and want to appear and be accepted in their environment. Many of these behaviors can bring risks to health such as smoking, drinking alcoholic beverages, drugs or premarital sexual behavior. Adolescents who are the next generation of nation-building who must be prepared as well as possible, an related to that various problems, especially during high school age that are very vulnerable to behaviors such as smoking and drinking. They must be equipped with knowledge and change their attitudes to be able to prevent risky and avoid bad impact towards their health and future.[1] The high number of smokers among high school students is caused by the lack of knowledge about the dangers of smoking, so it is necessary to educate using whatsapp media, in this case teenagers will be more interested in learning more from whatsaapp media which not only sound but also the picture shown.

Research conducted by Kusumawardani (2015), about health risk behaviors among middle and high school students in Indonesia found that the main risk behaviors that bring about health problems for the middle and high school students were smoking, breakfast, physical violence and alcohol consumption.[2] Fatin (2011) at the Surakarta Vocational School who stated effects of health education on the dangers of smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, stop smoking habits and avoid smoking, health education is needed. Health education achieve goals through changes in adolescent behavior.[3]

Based on WHO data in 2016 the percentage of smokers in ASEAN countries for Indonesia (46.16%), Philippines (16.62%), Vietnam (14.11%), Myanmar (8.73%), Thailand (7.74%), Malaysia (2.9%), Cambodia (2.07%), Laos (1.23%), Singapore (0.39%), and Brunei (0.04%).[4] Smoking prevalence rates among men remain generally higher than those of women, with Indonesia facing very high prevalence rates (above 64%) among their male pupulation, while Lao PDR, Malaysia, Myanamar, Philippines, and Vietnam have male smoking rates nearing 50%. It should be pointed out that in addition to the health burden from smoking, Myanmar Cambodia and Lao PDR also face significant "Smokeless tobacco" use. Furthermore, from a public health perspective, there is a distressing trend of increasing consumption in Indonesia, Myanmar, and, most alarming, Vietnam. [4]

In Indonesia, smoking is one of the habits of the community because the smoking prevalence rate tends to remain high, especially in men. In this case the government including the Ministry of Health together with other relevant ministries has sought to be able to control this smoking habit through various strategies and approaches. Government policy for tobacco control has been outlined in Government Regulation No. 109 of 2013. In the Government Regulation it clearly regulates cigarette advertisements, areas without cigarettes, and access to cigarettes to vulnerable groups in the community. In addition, the Ministry of Health in collaboration with related sectors has also implemented smoking prevention efforts, through smoking cessation programs and providing health education on the dangers of smoking, as well as other approaches at the community level, public facilities, schools, workplaces and groups. other populations.[5]

Based on data from the Central Bureau of Statistics of Pangkajene Kepulauan Regency in 2017 which consists of land and several islands that the population of Pangkajene Kepulauan Regency is 353,428 people with the number of adolescents aged 11-21 years around 35% of the population.[6] Pangkajene and Kepulauan Regency are one of the Regencies in South Sulawesi Province, with the capital being Pangkajene. Pangkep Regency initially had an area of 1112.29 Km2, after a joint analysis of Bakosurtanas the area was revised to 12,362.73 Km2 with a land area of 898.29 Km2 and a sea area of 11,464.44 Km2.

Based on the initial survey by distributing questionnaires to grade 2 students as many as 100 people at the Muhammadiyah Bungoro Public High School and 100 people at Pangkajene DDI Senior High School in Pangkep District who were present at the Muhammadiyah Bungoro High School were 85 students who had smoking habits, as many as 60 students smoked spend one pack (12 sticks) every day and 25 students spend 6 cigarettes a day, 57 students usually smoke in school and 28 only smoke outside the school environment. While in Pangkajene DDI Senior High School there were 93 students who had smoking habits, 53 students spent one pack (12 sticks) every day and 40 students spent 6 cigarettes per day, 60 students used to smoke in school and 33 only smoke outside the school.

Based on the supporting data obtained from the Counseling Guidance teacher during the last 3 months (June-August) that there were 47 students who committed school violations by smoking in the school environment. While in Pangkajene DDI Senior High School there were 43 students who committed school violations by smoking in the school environment. Students smoke in the school environment because there are no strict rules from the school regarding smoking bans, they also do not know about the dangers of smoking in the school environment. They have never received education in schools about the dangers of smoking.

Smoking behavior generally occurs in Private High Schools including Bungoro Muhammadiyah Senior High School and Pangkajene DDI Senior High School. Pangkep Regency as a place chosen by researchers because of the numbers Teen smokers in these schools are very high due to low knowledge and have never been touched by education both in the school and family environment. So that researchers provide education for students who have a habit of smoking through WhatsApp media for Bungoro Muhammadiyah Senior High School and leaflets for Pangkajene DDI Senior High School. So, the aim of this study was to assess the effect of education through the Whats App media on changes in smoking behavior in senior high school students in Pangkep Regency.

Method

The type of research used is quasi-experiment with a pretest-posttest design only control group design which is a study that determines the treatment (intervention) in the experimental group by comparing with the control group.[7,8] In this study, the experimental group received education with What Apps social media, while the control group was given education with leaflet media. Before the intervention, the pretest was performed in both groups. After giving the intervention, posttest was then carried out. This study uses questionnaires, a data collection techniques that are carried out by giving a set of questions or statements written to the respondent to answer by sharing with each respondent at the pretest and posttest. The population in this study were 330 grade 2 students enrolled in the Muhammadiyah Bungoro High School and Pangkajen DDI High School in Pangkep Regency. Data were collected through observation and interview to 180 respondents. The respondents in the control group were 90 and in the intervention group 90 students.

Selection of respondents used purposive sampling method based on the criteria of inclusion and exclusion. The inclusion criteria are criteria or standards set before the study that are used to determine whether a person can participate in a research study. The inclusion criteria used in this study are as follows: Class 2 male students who were registered and actively participated in learning in the last three months at the Muhammadiyah Bungoro and DDI Pangkajene High Schools in Pangkep Regency, Students who have Mobile phone and Whats App, Students who are willing became the respondent in this study by answering questions in the questionnaire and filling observation sheet. Exclusion criteria or exclusion criteria are criteria set before the study used to determine whether to participate or must be excluded. Data analysis paired sample t test and independent sample t test, because the data were normally distributed.

To simplify the research process, the researcher presents a series of activities during the research process, in the preparation Phase by determining and making research schedules, determining research assistants and preparing the material to be delivered. Consists of understanding towards cigarettes, hazardous substances and the dangers posed by cigarettes both for health and economic aspects and the impact on passive smoking. In the implementation phase, the initial stages of the implementation, is first open the greeting, do the introductory stage, open the class with prayers led by the class leader, and attend the attendees and those who are unable to attend, and the researcher explains the purpose of arrival, purpose, topic and description about the material that will be brought.

Steps for Health Education through the Media Whats App, are preparing material and supporting media. This material can be short messages, pictures or videos that contain invitations and appeals, provide pre-test, explain the purpose and topic of the meeting to the respondent, save student cellphone numbers become a sample (respondent), Create a Whats App group which is named the Respondent of SMKS Muhammadiyah Bungoro, Share health information in the form of health messages in the form of narrative texts, posters, pictures, or in audiovisual forms related to cigarette material. Performed for 1 week given at day and night regularly every day. At the final stage, is to do the post test by distributing the same questionnaire during the pre-test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after the health education intervention is given through the media Whats App.

Educational steps through Leaflet media are component preparing material and supporting media, providing pre-test, explaining the purpose and topic of the meeting to the respondent, distributing leaflets to each respondent with the help of research assistants and ensuring leaflets are evenly distributed, reciting the contents of the leaflets has been distributed and suggested to the respondent to listen and pay attention to the contents of the leaflet, recommend to the respondent to understand the contents of the leaflet and hope for changes in knowledge, attitudes and behavior after reading the leflet. The final stage is to perform the post test by distributing the same questionnaire during the pre test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after health education interventions are provided through leaflet media.

The Final Stage of this Implementation is to evaluate the results by checking respondents' answers, scoring data, tabulating research data and concluding how the level of knowledge, attitudes and behavior of students before and after being given health education through media Whats App and Leaflets. How to measure knowledge, attitudes and actions by distributing questionnaires using questionnaire measurement tools. Knowledge is the result of knowing respondents about matters relating to smoking risk behavior including the understanding of cigarettes, smoking and drinking alcohol, causative factors, the content of harmful substances and the negative impact of smoking behavior on individual health, learning achievement, environmental and social. While the act of smoking is an activity caused by addiction. When someone takes out a pack of cigarettes from his pocket and then takes a bar and turns it on, basically the activity is a series of commands from the brain caused by the addiction of certain addictive substances.

Knowledge and action questions are given two answer criteria namely YES or NO using the Guttman scale where if YES score = 1, if NO score = 0. Knowledge or action is said to be good If the respondent answers correctly $\geq$ 50% of all questions. While Knowledge or action is said to be lacking if the respondent answers correctly <50% of all questions.

Attitude variable is student response or response about risk behavior in the form of smoking behavior. Consists of 4 answer option statements with each score, SS (Strongly Agree) = 1, S (Agree) = 2, TS (Disagree) = 3, STS (Strongly Disagree) = 4. The sum of all statements is 10 so that the number of possible scores is obtained if the respondent's answer score is ,5 62.5% and it is said to be negative if the respondent's answer score <62.5%.

To find out whether there is a decrease or increase in students' knowledge, attitudes and actions, the results of the knowledge score, attitudes and actions during the post test are reduced by the results of the score of knowledge, attitudes and actions during the pre test. If the results of the difference in the score of knowledge, attitudes and pre-post test experiences a positive change means an increase, vice versa if the difference between the results of the score of knowledge, attitudes and actions during the pre-post test is negative, then the knowledge, attitudes and actions have decreased. As for the results of the difference in the score of knowledge, attitudes and actions pre-post test did not experience positive and negative changes or the result is zero (0) means that the students' knowledge, attitudes and actions remain unchanged.

This study has been approved by the Health Research Ethics Commission of the Universitas Muslim Indonesia and the Ibnu Sina Hospital YW-UMI Makassar Number: 058/A.1/KEPK-UMI/V/2018.

Results

The results showed that researchers did some preparation stage consists of (1) Determine and schedule research. (2) Determine research assistants according to predetermined requirements, namely those who know about the condition of students and the school environment under study, namely one of the school teachers who teach in the school under study. (3) Prepare material to be brought. (4) Prepare leaflets about the dangers of smoking. Preparing material in the form of theories, pictures and visual audio about smoking risk behavior which consists of: the understanding of cigarettes, the content of harmful substances of cigarettes and the dangers arising from smoking both for health and economic aspects and the impact for passive smokers.

Implementation phase: In the initial stages of the implementation, first opening with greetings, introducing the stage, opening the class with a prayer led by the class leader, and attend both attendees and those unable to attend, and researchers explain the purpose of arrival, goals, topics and a description of material to be brought.

Steps to Health Education through Whats App Media consists of: (1) Prepare material and supporting media. Material that will be given to respondents is material about cigarettes, namely: the content of hazardous substances from cigarettes, the dangers that will arise from smoking habits in terms of health, economy and environmental impact and people around it. This material can be in the form of short messages, pictures or videos that contain the meaning of solicitation and appeal. (2) Give a pre test, Distribute questionnaires to each respondent to determine the level of knowledge and attitudes of respondents before being given education through the Whats App media. Respondents were given the opportunity to fill out questionnaires within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents. The purpose of this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes in terms of health, economic losses, and impacts on the social environment. (4) Save the handphone number of the student who is the sample (respondent). (5) Create a Whats App group named Muhammadiyah Bungoro SMKS Respondents and Pangkajene DDI SMAS Respondents. (6) Share health information in the form of health messages like in the form of narrative texts, posters, pictures, or in the form of audiovisual related material cigarettes. Performed for 1 week given at the time of the day and night on a regular basis every day. (7) Evaluation. The final stage is to conduct a post test by distributing the same questionnaire during the pre test in order to find out if there are changes in students' knowledge and attitudes before and after they are given health education interventions through the Whats App media.

Educational steps through the Leaflet media consists of: (1) Prepare material and supporting media. Prepare leaflets containing material about cigarettes. The material to be given to respondents is material about cigarettes, namely: the content of hazardous substances from cigarettes, the danger that will arise from smoking habits in terms of health, economic and social. (2) Give a pre test. Distribute questionnaires to each respondent to find out the level of knowledge and attitudes of respondents before being given education through the Leaflet media. Respondents were given the opportunity to fill out questionnaires within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents The purpose of carrying out this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes both in terms of health, economic losses, and impacts on the social environment. (4) Distribute leaflets to each respondent with the help of research assistants and ensure the leaflets are evenly distributed. (5) Read back the contents of the leaflet that has been distributed and encourage respondents to listen and pay attention to the contents of the leaflet. (6) Encourage respondents to understand the contents of the leaflet and hope for a change in knowledge and attitudes after reading the leflet. (7) Encourage respondents to bring back the leaflets that were distributed one week later at the time of the evaluation. (8) Evaluation. The final stage is to do a post test by distributing the same questionnaire at the time of the pre test with the aim to find out if there are changes in students' knowledge and attitudes before and after the health education intervention is given through leaflet media.

The Final Stage of the Implementation is to evaluate the results of check the respondent's answer, perform data scoring, tabulate research data and see and conclude how the level of knowledge and attitudes of adolescents before and after being given health education through the Whats App and Leaflet media.

Results of this study were obtained through primary data using a questionnaire. Processing data using the computer statistic program. Data analysis results are displayed in the following tables:

Table 1. Distribution of Respondents Based on Knowledge Levels, Attitudes and Smoking Behaviors of High School Students When Pre Test and Post Test With Education Through Media WhatsApp and Leafletsin Pangkep Regency

Variable	Whats App (n=90)				Leaflet (n=90)			
	Pre test		Post test		Pre test		Post test	
	n	%	n	%	n	%	n	%
Knowledge								
Good	42	46.67	88	97.78	41	45.56	77	85.55
Less	48	53.33	2	2.22	48	54.44	13	14.45
Attitudes								
Positive	30	33.33	79	87.78	32	35.56	76	84.44
Negative	60	66.67	11	12.22	58	64.44	14	15.55
Behaviour								
Good	14	15.55	62	68.89	20	22.22	61	67.78
Less	76	84.44	28	31.11	70	77.78	29	32.22

Source :Primary Data 2018

Table 2. Distribution of Respondents Based onKnowledge Changes, Attitudes and Behavior About Cigarettes Before and After Intervention in Media Education WhatsUpp da Leaflet in Pangkep Regency

Commented [j1]: Belum ada p-value

Variable changes about smoking	WhatsApp (n=90)		Leaflet (n=90)	
	n	%	n	%
Knowledge				
Increase	73	81.1	59	65.6
Decrease	9	10.0	18	20.0
Remain	8	8.9	13	14.4
Attitudes				
Increase	74	82.2	72	80.0
Decrease	14	15.6	14	15.6
Remain	2	2.2	4	4.4
Behaviour				
Increase	74	82.2	68	75.6
Decrease	13	14.4	18	20.0
Remain	3	3.4	4	4.4

Source :Primary Data 2018

Table 3. Education Through Media WhatsUpp and Leaflets on Average Knowledge, Attitudes and Behavior About Cigarettes in High School Students in Pangkep Regency

Variable about Cigarettes	Knowledge			Attitudes			Behaviour		
	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*
Leaflet	4,27±1,29	6,51±1,55	0,000	24,63±6,35	31,61±4,44	0,000	4,36±1,46	6,47±1,67	0,000
Whats App	4,33±1,37	5,80±0,87	0,000	24,38±5,40	32,22±3,38	0,000	4,82±1,84	5,80±0,87	0,000
p**	0,812	0,009		0,772	0,030		0,186	0,021	

***Source :Primary Data* 2018 *: Paired t Test **: Independen Sample t Test**

This researched showed that there are inputs/comments from the participating students related to the tobacco education content of WA and Leaflet. The comments from participating students related to the tobacco education content of WA were very varied, they were very enthusiastic and critical in giving comments. There are positive and negative comments because the material presented in whats apps varies in written and audiovisual form. Videos delivered via Whats App can be lived up to students more quickly. The ease of comprehension of the material contained in the video is due to the presentation of the video that "contains a storyline" for someone who starts smoking to the diseases he suffers. Students are able to empathize with the circumstances of the characters in the video story, so that their knowledge and attitudes about smoking will be better. Whereas The comments from the participating students related to the tobacco education content of the leaflet were very few and tended to be one-way, students simply read information in the leaflet and there was no response because the leaflet contained information that was packaged in writing without a video that was more tangible in sight and applied in everyday life.

Discussion

The intervention is haalth education using leaflets and Whats App. The material given to students is material about cigarettes, such as the content of harmful substances from cigarettes, the danger that will be caused by smoking habits both in terms of health, economy and environmental impact and the people around them.

Media Whats App was chosen because it is a message-based application for Smathpone which is a cross-platform messaging application that allows users to exchange messages using

internet data packages. The use of whatsapp allows students to receive information through audio, visual and audiovisual media. Whereas Leaflet is a piece of paper containing writing in short, concise sentences, easy to understand and pictures that are simple, interesting and there are some that are presented in folded sheets of paper. Laflet only allows students to receive information visually.

Before the intervention about a half of the respondent in the leaflet group had less knowledge about cigarettes (54.4%), and after the educational intervention, more students had better knowledge about cigarettes were 77 students (85.55%). Students knowledge about cigarettes are increased 59 or 65.6% through leaflet education. The results showed that the group of students who were educated through the media leaflets also experienced an increase in knowledge, this happened because in the media leaflets the message was written clearly, and could be read repeatedly by students. While on Whats App media there is a tendency for students to only read messages once and messages in video form, students only enjoy the storyline on the video but are less able to capture the messages implicit in the video story.

Paired t-test results show that giving education through leaflets or Whats App will increase students' knowledge, attitudes and actions about smoking. Increased knowledge, attitudes and actions about cigarettes more on students who received educational intervention by Whats App compared to leaflets. The use of WhatsApp media is more effective as a health education media compared to leaflet media in increasing knowledge. The results showed that before the intervention whatsapp media the respondent had less knowledge about cigarettes were 53.33% and after the educational intervention, more students had better knowledge about cigarettes were 88 students (97.78%). Students knowledge about cigarettes are increased 73 or 81.1% through Whats App. This is because whats app messages delivered are clearly written, two-way and can be read repeatedly, and equipped with sounds and images. In addition, students are easier to access if needed because students can open whats app every time. While in the leaflet media there is a tendency for students to only read the message once, and the leaflet is usually quickly lost, scattered cause the students cannot reread and understand more, besides the leaflets are one-way.

This study are in accordance with the study of Ambarwati (2014), who stated that video media is more effective in increasing students' knowledge about the dangers of smokingcompared to leaflets.[9] The same study also concluded that there was an influence of health education on knowledge about the dangers of smoking in adolescents.[10,11,12,13,14,15] In addition, some research results also concluded that with health education through social media about danger smoking has been shown to reduce cigarette consumption in adolescents.[16,17,18,19,20]

The results of this study are not in line with the research conducted by Ristin (2016), on the effectiveness of health promotion with leaflet and video media on adolescent knowledge indicating that adolescent knowledge is sufficient, a good attitude after receiving counseling about smoking behavior.[10.]

Commented [j2]: 1 paragraf minimal 3 kalimat

A study conducted by Fatin (2011) at the Surakarta Vocational School on the Effect of Health Education on cigarette smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, health education is expected to stop smoking habits and avoid smoking health education is needed to change their awareness or increase adolescent knowledge about health care and improvement. Health education in achieves goals among teenegers change process in adolescent behavior.[3]

Attitude and behavior is a collection of symptoms or sindroma in response to a stimulus or an object. It involves thoughts, feelings, attention, and other psychiatric symptoms. [21,22]

Commented [j3]: 1 paragraf minimal 3 kalimat

Changes that occur in the respondent as a result of exposure to messages and information conveyed through health education, namely in the form of changes in behavior and attitudes that begin with changes in individual knowledge. The higher the knowledge of individual attitudes the more positive and the lower the knowledge, the more negative the attitudes and behavior of individuals.[23,24]

This study showed that before the intervention many students had negative attitudes about smoking, 66.67% in the WhatsApp group and 64.4% in the leaflet group. After the educational intervention, more students had positive attitude about smoking, 79 or 87.78% in the whatsapp group, and 76 or 84.44% in the leaflet group. Students who have a positive attitude about smoking increase through leaflet education are 68 people (75.6%), while through Whats App are 74 people (82.2%).

The attitude formation is influenced by several factors, such as physiological factors, experience factors, and social communication factors. A person's physiological factors will determine how a person behaves. Physiological factors related to age and health. Young people usually have a more free and courageous attitude compared to old age. People who are often sick or in sick condition will have an attitude that depends on others. Experience factors, a person's attitude will be influenced by the person's direct experience of the object of attitude. Factors of social communication, social communication can take the form of information from someone to another person who will influence attitudes.[25,26]

The result also showed that before the intervention students who had bad behavior about cigarettes in the WhatsApp group were 84.4% and in the leaflet group were 77.8%. After the educational intervention, more students had good behavior about cigarettes 62 or 68.89% in the whatsapp group, and 61 students or 67.78% in the leaflet group. Students who have good behavior about cigarettes increase by 75.6% or 68 people through leaflet education, while education for Whats App 82.2% or 74 people.

Paired t-test results show that giving education through leaflets or Whats App will improve students' attitudes about cigarettes ($p < 0.05$). Increased attitudes about cigarettes are more on respondents who received educational intervention by Whats App compared to leaflets. This is due to the material contained in the video via Whats App which can be more quickly appreciated by students. The ease of appreciation of the material contained in the video is caused by the presentation of a video that "contains the storyline" of someone who started smoking up to the diseases he suffered. The students are able to empathize with the circumstances of the characters in the story of the video. Than his attitude about smoking will be better while in the leaflet contains some "information about cigarettes and dangers that are packaged in a straightforward manner". The respondents get additional information and can improve their understanding of smoking and its dangers.

The research done by Dian L (2013) about Mobile-Based Video Learning Smooking Effect as an anti-smoking health education media, found that the use of the "smooking effect learning" video method was quite effective. The learning media used could be accessed by various groups easily via mobile phones.[14] These teenagers will be more interested in learning more from social media, that offer not only the sound but also the picture show.[27,28,29,30]

Conclusion

Education through WhatsApp social media is more effective than leaflet media in increasing the knowledge, attitudes and behavior of high school students about cigarettes. It is advised to disseminate health information with whats app, leaflets and other media about the dangers of smoking to teenagers in order to reduce and stop smoking.

Acknowledgment

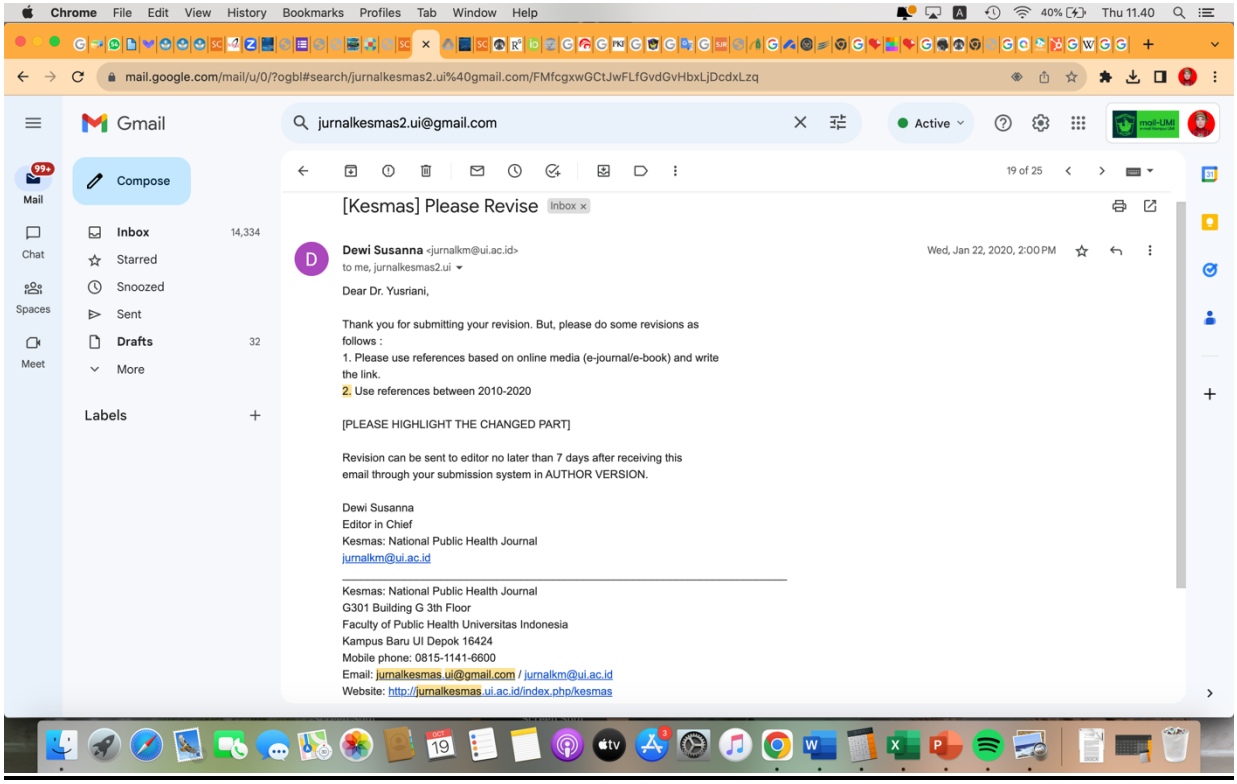
We would like to thank all the respondents of this research in Pangkep district, especially to the local government of Pangkep in supporting this research. The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) fully thanks to Universitas Muslim Indonesia for the financial support for the research, authorship, and/or publication of this article by the name of Internal Research Grant Funding.

References

1. World Health Organization, Adolescent Development: Topics at Glance. WHO, 2015.
2. Kusumawardani, Health risk behaviors in middle and high school students. 2015.
3. Fatin, Influence of Health Education on cigarette smoking in adolescents in Surakarta. 2011.
4. Ministry of Health of The Republic of Indonesia, Data and information Center. t.t. Adolescent Reproductive Health Situation. 2017.
5. Balitbangkes, Agency for Health Research and Development on Cigarettes and Health. 2016.
6. Agency, C.S., Pangkep Regency Population Data 2017. 2017.
7. Aril, B.S.R., Quantitative Research Methodology. Mold I, 2017.
8. Saryono, Qualitative and Quantitative Research Methodology in the Field of Health.

2013.
9. al., A.e., Leaflets, Videos and Knowledge of Students on the Dangers of Smoking (Study of Students at SDN 78 Sabrang Lor Mojosongo Surakarta). 2014.
10. Ristin, E., Effectiveness of health promotion with leaflet and video media on adolescent knowledge. 2016.
11. Ma, S., Effect of adolescent smoking prevention programs: influence of smoking prevention programs among public high school students in the city of Paranaque, Fhilipinja Soulivanh. 2010: National Public Health Institute, Japan.
12. Andrian, L., Effect of Mass Media, Family, and Friends on Youth Smoking Behavior in Yogyakarta. Makara Hubs-Asia, 2014,18 (1): 41-52 DOI: 10.7454 / mssh.v18il.3460. 2014.
13. R, K., Factors Associated with Smoking Behavior at Home in Jorong Ganting Ateh Nagari Tantung Alam Community. STIKES Prima Nusantara Health Journal Bukit Tinggi, 2014. 6.
14. Dian, L., about Mobile Based Video Learning Smooking Effect as an anti-smoking health education media. 2013.
15. Kaplan, A.M.M.H., "Users of The World, unite! “Challenges and opportunities of Social Media”. Business Horizons 53, 2010. 1: p. 59-68.
16. Yoo W, C.D., Park K, The effects of SNS communication: How to express and accept MERS-preventive behavioral intentions in South Korea. Computers in Human Behavior. 2016; 62: 34–43. doi: 10.1016 / j.chb.2016.03.058.
17. JE, C., Antismoking campaign videos on YouTube and audience response: Application of social media assessment metrics. Computers in Human Behavior. 2015; 51: 114–121. doi: 10.1016 / j.chb.2015.04.061.
18. Cunningham JA, S.P., Implications of the fallacy in young adult smokers aged 19-24 years. American Journal of Public Health, 2017. 97(8): p. 1399–1400.
19. De Viron S, S.L., Brand A, Van Oyen H, Communicating genetics and smoking through social media. Journal of Medical Internet Research, 2013. 15(9): p. 198.
20. Depue JB, S.B., Betzner AE, Walsh BM, Encoded exposure to tobacco use in social media predicts subsequent smoking behavior. American Journal of Health Promotion, 2015. 29(4): p. 259-261.
21. I, A., From intentions to actions: A theory of planned behavior. In: Kuhl J, Beckman J, editors. Action-control: From cognition to behavior. Heidelberg, Germany: Springer; 2015. pp. 11–39.
22. Ajzen I, F.M., Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall, 2009.
23. A, B., Social cognitive theory of mass communication. Media Psychology, 2011. 3(3): p. 265–299.
24. Bernhard U, D.M., Vowe G, Do presumed online media effects have influence on online activities of politicians? Policy & Internet. . 2015. 8(1): p. 72-90.
25. Yusriani, Yusriani, and Muhammad Khidri Alwi. “Buku ajar promosi kesehatan dan pemberdayaan masyarakat.” (2018): 1-59.
26. Murphy-Hoefer R, H.A., Rivard C, The influence of tobacco countmarking ads on college students’ knowledge, attitudes, and beliefs. Journal of American College Health, 2010. 58(4): p. 373-381.
27. Paek HJ, G.A., McLeod DM, Hove T, How adolescents’ perceived influence media on peers affects smoking decisions. Journal of Consumer Affairs, 2011. 45(1): p. 123-126.
28. Yusriani, Yusriani., Effective audio visual aids change the behavior of elementary school students in maintaining dental Publication Name : Indian Journal of Public Health Research and Development, 2019. 10 (3) p. 584-588.
29. Shmueli D, P.J., Glantz SA, The effect of smoking is a randomized controlled study. American Journal of Preventive Medicine, 2010. 38(4): p. 351–358.
30. J, P., Participating in health issue-specific social networking sites to quit smoking: How does social interconnection influence smoking cessation self-efficacy? Journal of Communication, 2013. 63: p. 933-952.

REVIEW 3



Gmail

jurnalkesmas2.ui@gmail.com

Compose

Inbox 14,334
Starred
Snoozed
Sent
Drafts 32
More

Labels

19 of 25

[Kesmas] Please Revise Inbox ×

Dewi Susanna <jurnalkm@ui.ac.id> Wed, Jan 22, 2020, 2:00 PM
to me, jurnalkesmas2.ui

Dear Dr. Yusriani,

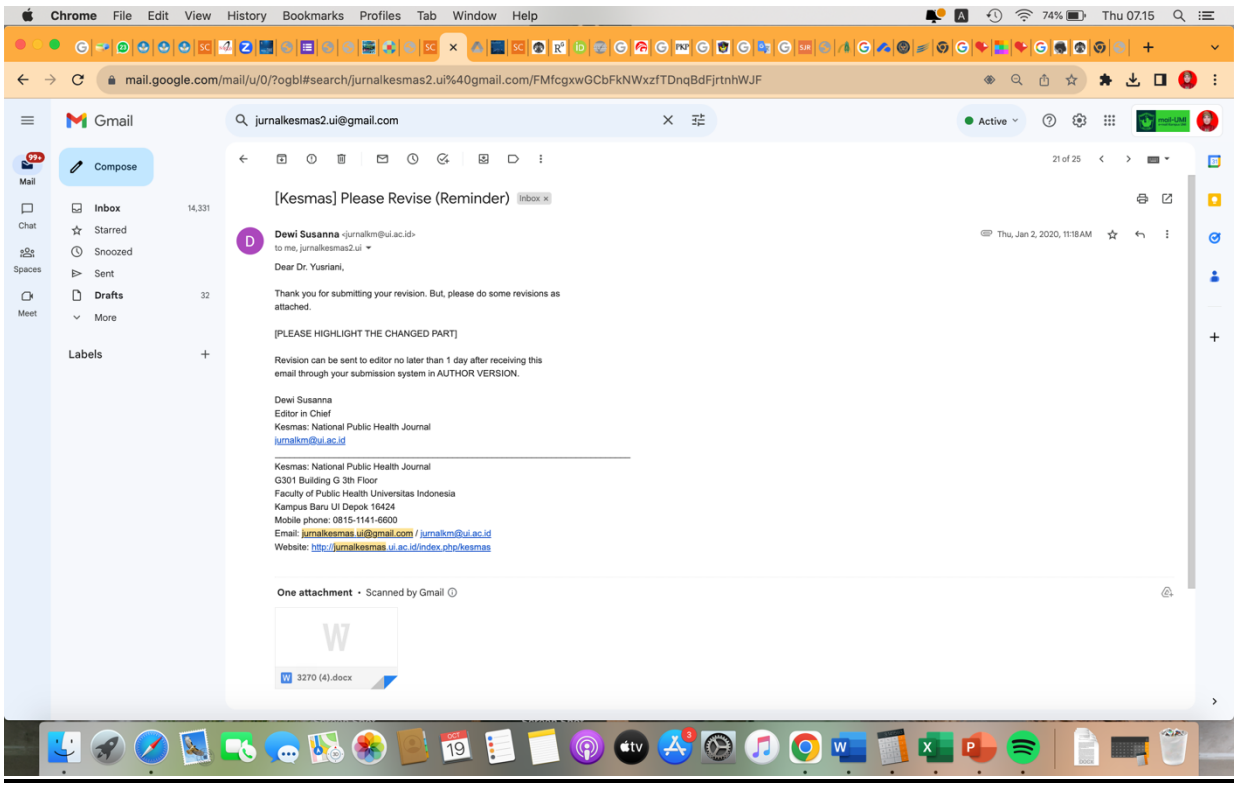
Thank you for submitting your revision. But, please do some revisions as follows :
1. Please use references based on online media (e-journal/e-book) and write the link.
2. Use references between 2010-2020

[PLEASE HIGHLIGHT THE CHANGED PART]

Revision can be sent to editor no later than 7 days after receiving this email through your submission system in AUTHOR VERSION.

Dewi Susanna
Editor in Chief
Kesmas: National Public Health Journal
jurnalkm@ui.ac.id

Kesmas: National Public Health Journal
G301 Building G 3th Floor
Faculty of Public Health Universitas Indonesia
Kampus Baru UI Depok 16424
Mobile phone: 0815-1141-6600
Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id
Website: http://jurnalkesmas.ui.ac.id/index.php/kesmas



Gmail

jurnalkesmas2.ui@gmail.com

Compose

Inbox 14,331
Starred
Snoozed
Sent
Drafts 32
More

Labels

21 of 25

[Kesmas] Please Revise (Reminder) Inbox ×

Dewi Susanna <jurnalkm@ui.ac.id> Thu, Jan 2, 2020, 11:18 AM
to me, jurnalkesmas2.ui

Dear Dr. Yusriani,

Thank you for submitting your revision. But, please do some revisions as attached.

[PLEASE HIGHLIGHT THE CHANGED PART]

Revision can be sent to editor no later than 1 day after receiving this email through your submission system in AUTHOR VERSION.

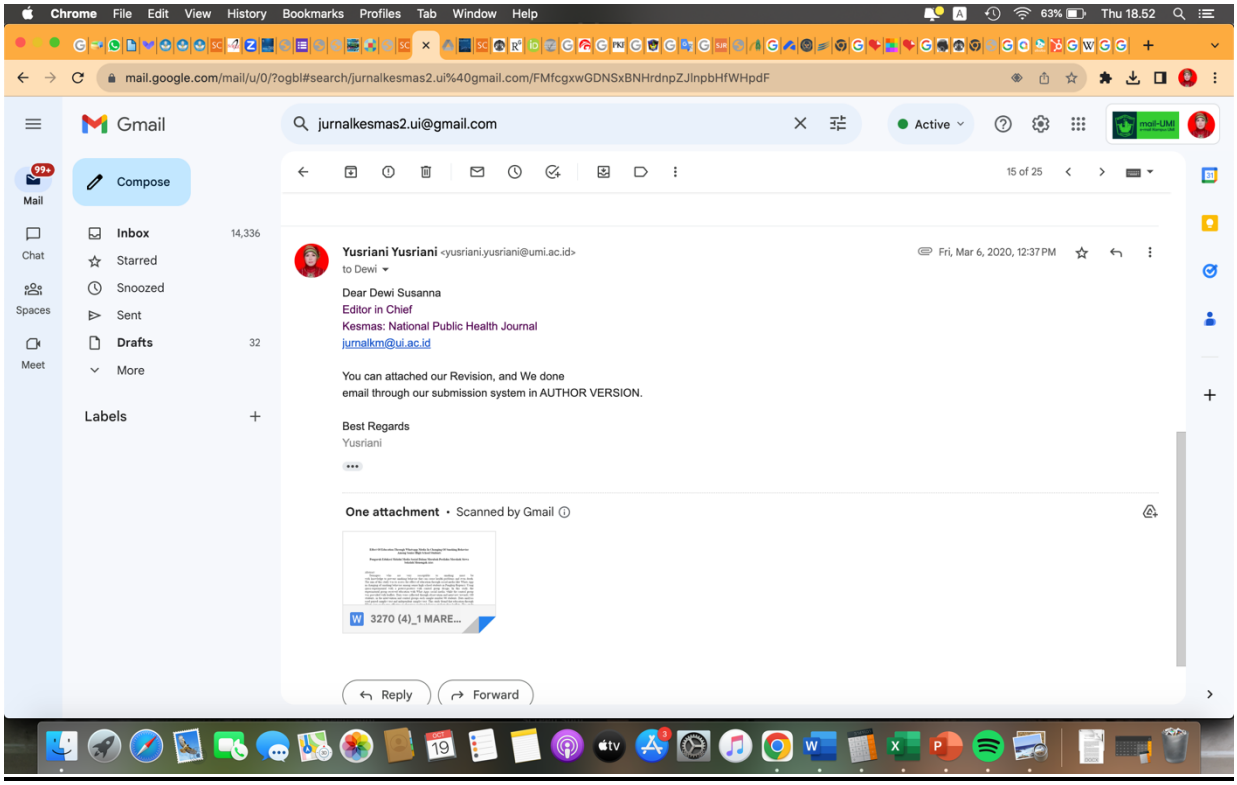
Dewi Susanna
Editor in Chief
Kesmas: National Public Health Journal
jurnalkm@ui.ac.id

Kesmas: National Public Health Journal
G301 Building G 3th Floor
Faculty of Public Health Universitas Indonesia
Kampus Baru UI Depok 16424
Mobile phone: 0815-1141-6600
Email: jurnalkesmas.ui@gmail.com / jurnalkm@ui.ac.id
Website: http://jurnalkesmas.ui.ac.id/index.php/kesmas

One attachment • Scanned by Gmail

3270 (4).docx

HASIL REVIEW SUBSTANSI “3”



Gmail

jurnalkesmas2.ui@gmail.com

Compose

Inbox 14,336
Starred
Snoozed
Sent
Drafts 32
More

Labels

15 of 25

Yusriani Yusriani <yusriani.yusriani@umi.ac.id> Fri, Mar 6, 2020, 12:37 PM
to Dewi

Dear Dewi Susanna
Editor in Chief
Kesmas: National Public Health Journal
jurnalkm@ui.ac.id

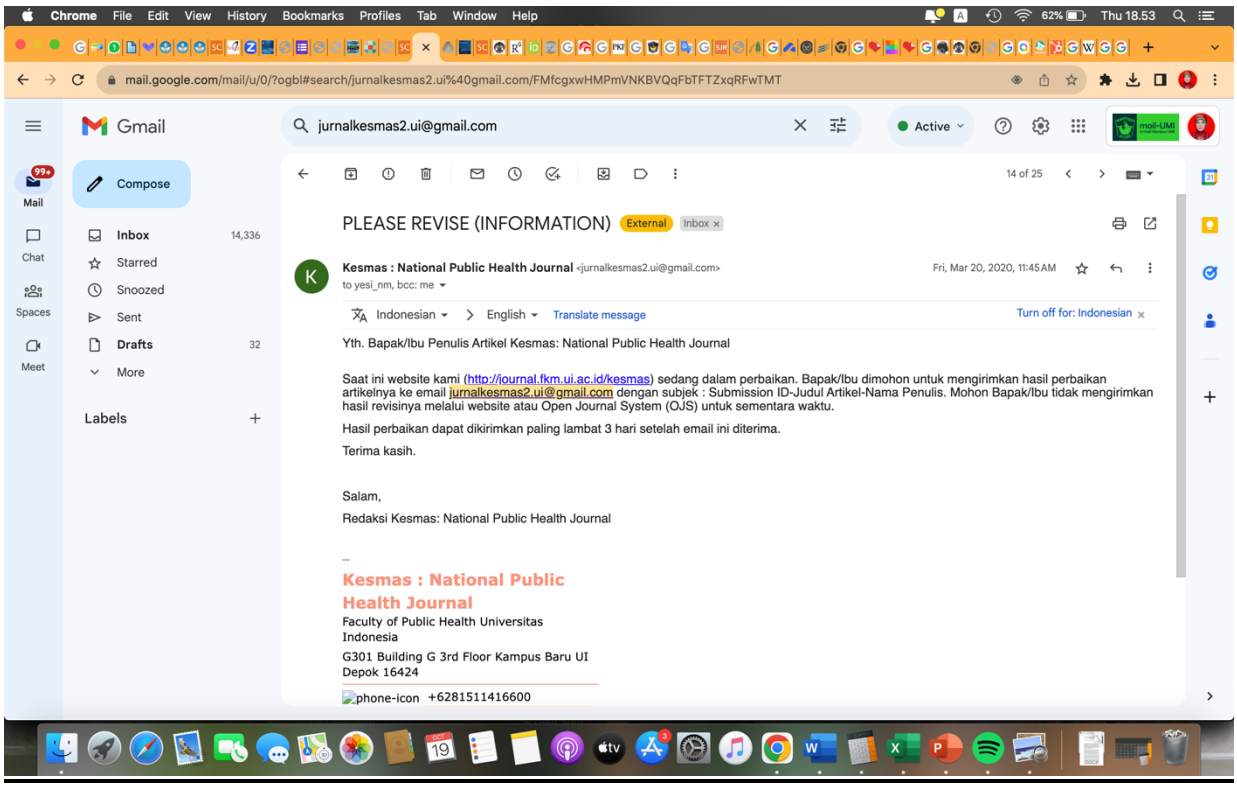
You can attached our Revision, and We done
email through our submission system in AUTHOR VERSION.

Best Regards
Yusriani

One attachment • Scanned by Gmail

3270 (4)_1 MARE...

Reply Forward



Gmail

jurnalkesmas2.ui@gmail.com

Compose

Inbox 14,336
Starred
Snoozed
Sent
Drafts 32
More

Labels

14 of 25

PLEASE REVISE (INFORMATION) External Inbox ×

Kesmas : National Public Health Journal <jurnalkesmas2.ui@gmail.com> Fri, Mar 20, 2020, 11:45 AM
to yesi_nm, bcc: me

Indonesian > English Translate message Turn off for: Indonesian

Yth. Bapak/Ibu Penulis Artikel Kesmas: National Public Health Journal

Saat ini website kami (http://journal.fkm.ui.ac.id/kesmas) sedang dalam perbaikan. Bapak/Ibu dimohon untuk mengirimkan hasil perbaikan artikelnya ke email jurnalkesmas2.ui@gmail.com dengan subjek : Submission ID-Judul Artikel-Nama Penulis. Mohon Bapak/Ibu tidak mengirimkan hasil revisinya melalui website atau Open Journal System (OJS) untuk sementara waktu.

Hasil perbaikan dapat dikirimkan paling lambat 3 hari setelah email ini diterima.

Terima kasih.

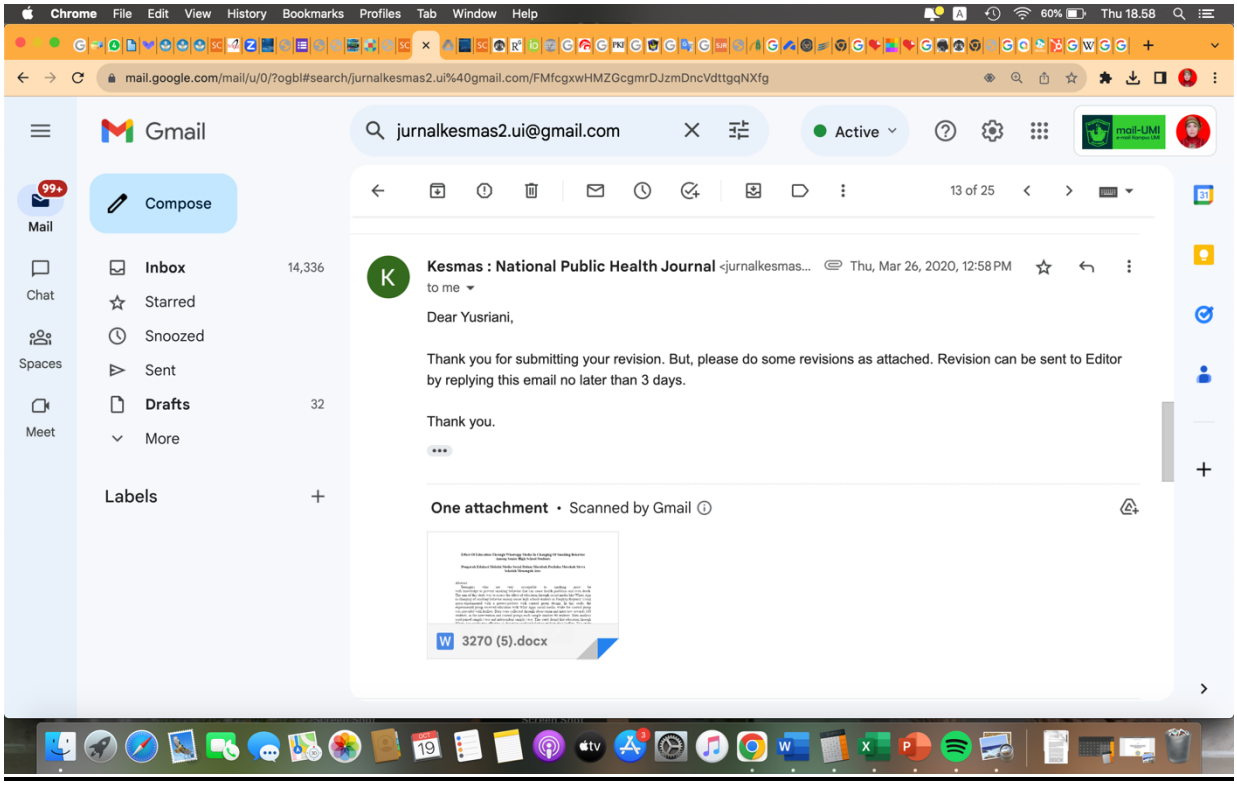
Salam,

Redaksi Kesmas: National Public Health Journal

--

Kesmas : National Public Health Journal
Faculty of Public Health Universitas Indonesia
G301 Building G 3rd Floor Kampus Baru UI
Depok 16424
phone-icon +6281511416600

REVIEW 4


Chrome File Edit View History Bookmarks Profiles Tab Window Help
Thu 18.58
mail.google.com/mail/u/0/?ogbl#search/jurnalkesmas2.ui%40gmail.com/FMfcgxwHMZGcgmrDJzmDncVdttgqNXfg
Gmail
jurnalkesmas2.ui@gmail.com
Active
Compose
Inbox 14,336
Starred
Snoozed
Sent
Drafts 32
More
Labels
Mail
Chat
Spaces
Meet
13 of 25
Kesmas : National Public Health Journal <jurnalkesmas...
Thu, Mar 26, 2020, 12:58 PM
to me
Dear Yusriani,
Thank you for submitting your revision. But, please do some revisions as attached. Revision can be sent to Editor by replying this email no later than 3 days.
Thank you.
One attachment • Scanned by Gmail
3270 (5).docx

HASIL REVIEW SUBSTANSI “4”

Effect Of Education Through Whatsapp Media In Changing Of Smoking Behavior Among Senior High School Students

Pengaruh Edukasi Melalui Media Sosial Dalam Merubah Perilaku Merokok Siswa Sekolah Menengah Atas

Abstract

Teenagers who are very susceptible to smoking must be with knowledge to prevent smoking behavior that can cause health problems and even death. The aim of this study was to assess the effect of education through social media like Whats App in changing of smoking behavior among senior high school students in Pangkep Regency. Using quasi-experimental with a pretest-posttest with control group design. In this study, the experimental group received education with What Apps social media, while the control group was provided with leaflets. Data were collected through observation and interview towards 180 students, in the intervention and control groups each sample number 90 students. Data analysis used paired sample t test and independent sample t test. This study found that education through Whats App media was effective in changing smoking behavior students than leaflets. This study suggested to disseminate health information with whats app about the dangers of smoking to teenagers in order to reduce and stop smoking.

Keywords: Behavior, smoking, whatsapp, leaflets, students.

Introduction

Teenagers who are the younger generation who will determine the fate of the nation in the future. A quality generation is absolutely necessary, despite in reality social change and a more modern lifestyle in the society tend to also increase various problems in the life of the younger generation. This is due to teenagers experiencing a transition period where they always want to try various things that are considered modern and do not want to miss, an easily affected and want to appear and be accepted in their environment. Many of these behaviors can bring risks to health such as smoking, drinking alcoholic beverages, drugs or premarital sexual behavior. Adolescents who are the next generation of nation-building who must be prepared as well as possible, an related to that various problems, especially during high school age that are very vulnerable to behaviors such as smoking and drinking. They must be equipped with knowledge and change their attitudes to be able to prevent risky and avoid bad impact towards their health and future.[1] The high number of smokers among high school students is caused by the lack of knowledge about the dangers of smoking, so it is necessary to educate using whatsapp media, in this case teenagers will be more interested in learning more from whatsaapp media which not only sound but also the picture shown.

Research conducted by Kusumawardani (2015), about health risk behaviors among middle and high school students in Indonesia found that the main risk behaviors that bring about health problems for the middle and high school students were smoking, breakfast, physical violence and alcohol consumption.[2] Fatin (2011) at the Surakarta Vocational School who stated effects of health education on the dangers of smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, stop smoking habits and avoid smoking, health education is needed. Health education achieve goals through changes in adolescent behavior.[3]

Based on WHO data in 2016 the percentage of smokers in ASEAN countries for Indonesia (46.16%), Philippines (16.62%), Vietnam (14.11%), Myanmar (8.73%), Thailand (7.74%), Malaysia (2.9%), Cambodia (2.07%), Laos (1.23%), Singapore (0.39%), and Brunei (0.04%).[4] Smoking prevalence rates among men remain generally higher than those of women, with Indonesia facing very high prevalence rates (above 64%) among their male pupulation, while Lao PDR, Malaysia, Myanamar, Philippines, and Vietnam have male smoking rates nearing 50%. It should be pointed out that in addition to the health burden from smoking, Myanmar Cambodia and Lao PDR also face significant “Smokeless tobacco” use. Furthermore, from a public health perspective, there is a distressing trend of increasing consumption in Indonesia, Myanmar, and, most alarming, Vietnam. [4]

Commented [U1]: Cara membuat kutipan mohon disesuaikan dengan VANCOUVER STYLE. Lakukan perbaikan untuk penulisan pengutipan yang seperti ini.

In Indonesia, smoking is one of the habits of the community because the smoking prevalence rate tends to remain high, especially in men. In this case the government including the Ministry of Health together with other relevant ministries has sought to be able to control this smoking habit through various strategies and approaches. Government policy for tobacco control has been outlined in Government Regulation No. 109 of 2013. In the Government Regulation it clearly regulates cigarette advertisements, areas without cigarettes, and access to cigarettes to vulnerable groups in the community. In addition, the Ministry of Health in collaboration with related sectors has also implemented smoking prevention efforts, through smoking cessation programs and providing health education on the dangers of smoking, as well as other approaches at the community level, public facilities, schools, workplaces and groups. other populations.[5]

Based on data from the Central Bureau of Statistics of Pangkajene Kepulauan Regency in 2017 which consists of land and several islands that the population of Pangkajene Kepulauan Regency is 353,428 people with the number of adolescents aged 11-21 years around 35% of the population.[6] Pangkajene and Kepulauan Regency are one of the Regencies in South Sulawesi Province, with the capital being Pangkajene. Pangkep Regency initially had an area of 1112.29 Km2, after a joint analysis of Bakosurtanas the area was revised to 12,362.73 Km2 with a land area of 898.29 Km2 and a sea area of 11,464.44 Km2.

Based on the initial survey by distributing questionnaires to grade 2 students as many as 100 people at the Muhammadiyah Bungoro Public High School and 100 people at Pangkajene DDI Senior High School in Pangkep District who were present at the Muhammadiyah Bungoro High School were 85 students who had smoking habits, as many as 60 students smoked spend one pack (12 sticks) every day and 25 students spend 6 cigarettes a day, 57 students usually smoke in school and 28 only smoke outside the school environment. While in Pangkajene DDI Senior High School there were 93 students who had smoking habits, 53 students spent one pack (12 sticks) every day and 40 students spent 6 cigarettes per day, 60 students used to smoke in school and 33 only smoke outside the school.

Based on the supporting data obtained from the Counseling Guidance teacher during the last 3 months (June-August) that there were 47 students who committed school violations by smoking in the school environment. While in Pangkajene DDI Senior High School there were 43 students who committed school violations by smoking in the school environment. Students smoke in the school environment because there are no strict rules from the school regarding smoking bans, they also do not know about the dangers of smoking in the school environment. They have never received education in schools about the dangers of smoking.

Smoking behavior generally occurs in Private High Schools including Bungoro Muhammadiyah Senior High School and Pangkajene DDI Senior High School. Pangkep Regency as a place chosen by researchers because of the numbers Teen smokers in these schools are very high due to low knowledge and have never been touched by education both in the school and family environment. So that researchers provide education for students who have a habit of smoking through WhatsApp media for Bungoro Muhammadiyah Senior High School and leaflets for Pangkajene DDI Senior High School. So, the aim of this study was to assess the effect of education through the Whats App media on changes in smoking behavior in senior high school students in Pangkep Regency.

Method

The type of research used is quasi-experiment with a pretest-posttest design only control group design which is a study that determines the treatment (intervention) in the experimental group by comparing with the control group.[7,8] In this study, the experimental group received education with What Apps social media, while the control group was given education with leaflet media. Before the intervention, the pretest was performed in both groups. After giving the intervention, posttest was then carried out. This study uses questionnaires, a data collection techniques that are carried out by giving a set of questions or statements written to the respondent to answer by sharing with each respondent at the pretest and posttest. The population in this study were 330 grade 2 students enrolled in the Muhammadiyah Bungoro High School and Pangkajen DDI High School in Pangkep Regency. Data were collected through observation and interview to 180 respondents. The respondents in the control group were 90 and in the intervention group 90 students.

Selection of respondents used purposive sampling method based on the criteria of inclusion

and exclusion. The inclusion criteria are criteria or standards set before the study that are used to determine whether a person can participate in a research study. The inclusion criteria used in this study are as follows: Class 2 male students who were registered and actively participated in learning in the last three months at the Muhammadiyah Bungoro and DDI Pangkajene High Schools in Pangkep Regency, Students who have Mobile phone and Whats App, Students who are willing became the respondent in this study by answering questions in the questionnaire and filling observation sheet. Exclusion criteria or exclusion criteria are criteria set before the study used to determine whether to participate or must be excluded. Data analysis paired sample t test and independent sample t test, because the data were normally distributed.

To simplify the research process, the researcher presents a series of activities during the research process, in the preparation Phase by determining and making research schedules, determining research assistants and preparing the material to be delivered. Consists of understanding towards cigarettes, hazardous substances and the dangers posed by cigarettes both for health and economic aspects and the impact on passive smoking. In the implementation phase, the initial stages of the implementation, is first open the greeting, do the introductory stage, open the class with prayers led by the class leader, and attend the attendees and those who are unable to attend, and the researcher explains the purpose of arrival, purpose, topic and description about the material that will be brought.

Steps for Health Education through the Media Whats App, are preparing material and supporting media. This material can be short messages, pictures or videos that contain invitations and appeals, provide pre-test, explain the purpose and topic of the meeting to the respondent, save student cellphone numbers become a sample (respondent), Create a Whats App group which is named the Respondent of SMKS Muhammadiyah Bungoro, Share health information in the form of health messages in the form of narrative texts, posters, pictures, or in audiovisual forms related to cigarette material. Performed for 1 week given at day and night regularly every day. At the final stage, is to do the post test by distributing the same questionnaire during the pre-test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after the health education intervention is given through the media Whats App.

Educational steps through Leaflet media are component preparing material and supporting media, providing pre-test, explaining the purpose and topic of the meeting to the respondent, distributing leaflets to each respondent with the help of research assistants and ensuring leaflets are evenly distributed, reciting the contents of the leaflets has been distributed and suggested to the respondent to listen and pay attention to the contents of the leaflet, recommend to the respondent to understand the contents of the leaflet and hope for changes in knowledge, attitudes and behavior after reading the leflet. The final stage is to perform the post test by distributing the same questionnaire during the pre test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after health education interventions are provided through leaflet media.

The Final Stage of this Implementation is to evaluate the results by checking respondents' answers, scoring data, tabulating research data and concluding how the level of knowledge, attitudes and behavior of students before and after being given health education through media Whats App and Leaflets. How to measure knowledge, attitudes and actions by distributing questionnaires using questionnaire measurement tools. Knowledge is the result of knowing respondents about matters relating to smoking risk behavior including the understanding of cigarettes, smoking and drinking alcohol, causative factors, the content of harmful substances and the negative impact of smoking behavior on individual health, learning achievement, environmental and social. While the act of smoking is an activity caused by addiction. When someone takes out a pack of cigarettes from his pocket and then takes a bar and turns it on, basically the activity is a series of commands from the brain caused by the addiction of certain addictive substances.

Knowledge and action questions are given two answer criteria namely YES or NO using the Guttman scale where if YES score = 1, if NO score = 0. Knowledge or action is said to be good If the respondent answers correctly $\geq$ 50% of all questions. While Knowledge or action is said to be lacking if the respondent answers correctly <50% of all questions.

Attitude variable is student response or response about risk behavior in the form of smoking behavior. Consists of 4 answer option statements with each score, SS (Strongly Agree) = 1, S

(Agree) = 2, TS (Disagree) = 3, STS (Strongly Disagree) = 4. The sum of all statements is 10 so that the number of possible scores is obtained if the respondent's answer score is ,5 62.5% and it is said to be negative if the respondent's answer score <62.5%.

To find out whether there is a decrease or increase in students' knowledge, attitudes and actions, the results of the knowledge score, attitudes and actions during the post test are reduced by the results of the score of knowledge, attitudes and actions during the pre test. If the results of the difference in the score of knowledge, attitudes and pre-post test experiences a positive change means an increase, vice versa if the difference between the results of the score of knowledge, attitudes and actions during the pre-post test is negative, then the knowledge, attitudes and actions have decreased. As for the results of the difference in the score of knowledge, attitudes and actions pre-post test did not experience positive and negative changes or the result is zero (0) means that the students' knowledge, attitudes and actions remain unchanged.

This study has been approved by the Health Research Ethics Commission of the Universitas Muslim Indonesia and the Ibnu Sina Hospital YW-UMI Makassar Number: 058/A.1/KEPK-UMI/V/2018.

Results

The results showed that researchers did some preparation stage consists of (1) Determine and schedule research. (2) Determine research assistants according to predetermined requirements, namely those who know about the condition of students and the school environment under study, namely one of the school teachers who teach in the school under study. (3) Prepare material to be brought. (4) Prepare leaflets about the dangers of smoking. Preparing material in the form of theories, pictures and visual audio about smoking risk behavior which consists of: the understanding of cigarettes, the content of harmful substances of cigarettes and the dangers arising from smoking both for health and economic aspects and the impact for passive smokers.

Implementation phase: In the initial stages of the implementation, first opening with greetings, introducing the stage, opening the class with a prayer led by the class leader, and attend both attendees and those unable to attend, and researchers explain the purpose of arrival, goals, topics and a description of material to be brought.

Steps to Health Education through Whats App Media consists of: (1) Prepare material and supporting media. Material that will be given to respondents is material about cigarettes, namely: the content of hazardous substances from cigarettes, the dangers that will arise from smoking habits in terms of health, economy and environmental impact and people around it. This material can be in the form of short messages, pictures or videos that contain the meaning of solicitation and appeal. (2) Give a pre test, Distribute questionnaires to each respondent to determine the level of knowledge and attitudes of respondents before being given education through the Whats App media. Respondents were given the opportunity to fill out questionnaires within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents. The purpose of this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes in terms of health, economic losses, and impacts on the social environment. (4) Save the handphone number of the student who is the sample (respondent). (5) Create a Whats App group named Muhammadiyah Bungoro SMKS Respondents and Pangkajene DDI SMAS Respondents. (6) Share health information in the form of health messages like in the form of narrative texts, posters, pictures, or in the form of audiovisual related material cigarettes. Performed for 1 week given at the time of the day and night on a regular basis every day. (7) Evaluation. The final stage is to conduct a post test by distributing the same questionnaire during the pre test in order to find out if there are changes in students' knowledge and attitudes before and after they are given health education interventions through the Whats App media.

Educational steps through the Leaflet media consists of: (1) Prepare material and supporting media. Prepare leaflets containing material about cigarettes. The material to be given to respondents is material about cigarettes, namely: the content of hazardous substances from

cigarettes, the danger that will arise from smoking habits in terms of health, economic and social. (2) Give a pre test. Distribute questionnaires to each respondent to find out the level of knowledge and attitudes of respondents before being given education through the Leaflet media. Respondents were given the opportunity to fill out questionnaires within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents The purpose of carrying out this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes both in terms of health, economic losses, and impacts on the social environment. (4) Distribute leaflets to each respondent with the help of research assistants and ensure the leaflets are evenly distributed. (5) Read back the contents of the leaflet that has been distributed and encourage respondents to listen and pay attention to the contents of the leaflet. (6) Encourage respondents to understand the contents of the leaflet and hope for a change in knowledge and attitudes after reading the leflet. (7) Encourage respondents to bring back the leaflets that were distributed one week later at the time of the evaluation. (8) Evaluation. The final stage is to do a post test by distributing the same questionnaire at the time of the pre test with the aim to find out if there are changes in students' knowledge and attitudes before and after the health education intervention is given through leaflet media.

The Final Stage of the Implementation is to evaluate the results of check the respondent's answer, perform data scoring, tabulate research data and see and conclude how the level of knowledge and attitudes of adolescents before and after being given health education through the Whats App and Leaflet media.

Results of this study were obtained through primary data using a questionnaire. Processing data using the computer statistic program. Data analysis results are displayed in the following tables:

Table1. Distribution of Respondents Based on Knowledge Levels, Attitudes and Smoking Behaviors of High School Students When Pre Test and Post Test With Education Through Media WhatsApp and Leafletsin Pangkep Regency

Variable	Whats App (n=90)				Leaflet (n=90)			
	Pre test		Post test		Pre test		Post test	
	n	%	n	%	n	%	n	%
Knowledge								
Good	42	46.67	88	97.78	41	45.56	77	85.55
Less	48	53.33	2	2.22	48	54.44	13	14.45
Attitudes								
Positive	30	33.33	79	87.78	32	35.56	76	84.44
Negative	60	66.67	11	12.22	58	64.44	14	15.55
Behaviour								
Good	14	15.55	62	68.89	20	22.22	61	67.78
Less	76	84.44	28	31.11	70	77.78	29	32.22

Source :Primary Data 2018

Table 2. Distribution of Respondents Based onKnowledge Changes, Attitudes and Behavior About Cigarettes Before and After Intervention in Media Education WhatsUpp da Leaflet in Pangkep Regency

Variable changes about smoking	WhatsApp (n=90)		Leaflet (n=90)	
	n	%	n	%
Knowledge				

Variable changes about smoking	WhatsApp (n=90)		Leaflet (n=90)	
	n	%	n	%
Increase	73	81.1	59	65.6
Decrease	9	10.0	18	20.0
Remain	8	8.9	13	14.4
Attitudes				
Increase	74	82.2	72	80.0
Decrease	14	15.6	14	15.6
Remain	2	2.2	4	4.4
Behaviour				
Increase	74	82.2	68	75.6
Decrease	13	14.4	18	20.0
Remain	3	3.4	4	4.4

Source :Primary Data 2018

Table 3. Education Through Media WhatsUpp and Leaflets on Average Knowledge, Attitudes and Behavior About Cigarettes in High School Students in Pangkep Regency

Variable about Cigarettes	Knowledge			Attitudes			Behaviour		
	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*
Leaflet	4,27±1,29	6,51±1,55	0,000	24,63±6,35	31,61±4,44	0,000	4,36±1,46	6,47±1,67	0,000
Whats App	4,33±1,37	5,80±0,87	0,000	24,38±5,40	32,22±3,38	0,000	4,82±1,84	5,80±0,87	0,000
p**	0,812	0,009		0,772	0,030		0,186	0,021	

Source :Primary Data 2018 *: Paired t Test **: Independen Sample t Test

This researched showed that there are inputs/comments from the participating students related to the tobacco education content of WA and Leaflet. The comments from participating students related to the tobacco education content of WA were very varied, they were very enthusiastic and critical in giving comments. There are positive and negative comments because the material presented in whats apps varies in written and audiovisual form. Videos delivered via Whats App can be lived up to students more quickly. The ease of comprehension of the material contained in the video is due to the presentation of the video that "contains a storyline" for someone who starts smoking to the diseases he suffers. Students are able to empathize with the circumstances of the characters in the video story, so that their knowledge and attitudes about smoking will be better. Whereas The comments from the participating students related to the tobacco education content of the leaflet were very few and tended to be one-way, students simply read information in the leaflet and there was no response because the leaflet contained information that was packaged in writing without a video that was more tangible in sight and applied in everyday life.

Discussion

The intervention is haalth education using leaflets and Whats App. The material given to students is material about cigarettes, such as the content of harmful substances from cigarettes, the danger that will be caused by smoking habits both in terms of health, economy and environmental impact and the people around them.

Media Whats App was chosen because it is a message-based application for Smathpone which is a cross-platform messaging application that allows users to exchange messages using internet data packages. The use of whatsapp allows students to receive information through audio, visual and audiovisual media. Whereas Leaflet is a piece of paper containing writing in short, concise sentences, easy to understand and pictures that are simple, interesting and there are some

that are presented in folded sheets of paper. Laflet only allows students to receive information visually.

Before the intervention about a half of the respondent in the leaflet group had less knowledge about cigarettes (54.4%), and after the educational intervention, more students had better knowledge about cigarettes were 77 students (85.55%). Students knowledge about cigarettes are increased 59 or 65.6% through leaflet education. The results showed that the group of students who were educated through the media leaflets also experienced an increase in knowledge, this happened because in the media leaflets the message was written clearly, and could be read repeatedly by students. While on Whats App media there is a tendency for students to only read messages once and messages in video form, students only enjoy the storyline on the video but are less able to capture the messages implicit in the video story.

Paired t-test results show that giving education through leaflets or Whats App will increase students' knowledge, attitudes and actions about smoking. Increased knowledge, attitudes and actions about cigarettes more on students who received educational intervention by Whats App compared to leaflets. The use of WhatsApp media is more effective as a health education media compared to leaflet media in increasing knowledge. The results showed that before the intervention whatsapp media the respondent had less knowledge about cigarettes were 53.33% and after the educational intervention, more students had better knowledge about cigarettes were 88 students (97.78%). Students knowledge about cigarettes are increased 73 or 81.1% through Whats App. This is because whats app messages delivered are clearly written, two-way and can be read repeatedly, and equipped with sounds and images. In addition, students are easier to access if needed because students can open whats app every time. While in the leaflet media there is a tendency for students to only read the message once, and the leaflet is usually quickly lost, scattered cause the students cannot reread and understand more, besides the leaflets are one-way.

This study are in accordance with the study of Ambarwati (2014), who stated that video media is more effective in increasing students' knowledge about the dangers of smokingcompared to leaflets.[9] The same study also concluded that there was an influence of health education on knowledge about the dangers of smoking in adolescents.[10,11,12,13,14,15] In addition, some research results also concluded that with health education through social media about danger smoking has been shown to reduce cigarette consumption in adolescents.[16,17,18,19,20]

The results of this study are not in line with the research conducted by Ristin (2016), on the effectiveness of health promotion with leaflet and video media on adolescent knowledge indicating that adolescent knowledge is sufficient, a good attitude after receiving counseling about smoking behavior.[10.]

A study conducted by Fatin (2011) at the Surakarta Vocational School on the Effect of Health Education on cigarette smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, health education is expected to stop smoking habits and avoid smoking health education is needed to change their awareness or increase adolescent knowledge about health care and improvement. Health education in achieves goals among teenegers change process in adolescent behavior.[3]

Attitude and behavior is a collection of symptoms or sindroma in response to a stimulus or an object. It involves thoughts, feelings, attention, and other psychiatric symptoms. [21,22]

Changes that occur in the respondent as a result of exposure to messages and information conveyed through health education, namely in the form of changes in behavior and attitudes that begin with changes in individual knowledge. The higher the knowledge of individual attitudes the more positive and the lower the knowledge, the more negative the attitudes and behavior of individuals.[23,24]

This study showed that before the intervention many students had negative attitudes about smoking, 66.67% in the WhatsApp group and 64.4% in the leaflet group. After the educational intervention, more students had positive attitude about smoking, 79 or 87.78% in the whatsapp group, and 76 or 84.44% in the leaflet group. Students who have a positive attitude about smoking increase through leaflet education are 68 people (75.6%), while through Whats App are 74 people (82.2%).

The attitude formation is influenced by several factors, such as physiological factors, experience factors, and social communication factors. A person's physiological factors will determine how a person behaves. Physiological factors related to age and health. Young people usually have a more free and courageous attitude compared to old age. People who are often sick

or in sick condition will have an attitude that depends on others. Experience factors, a person's attitude will be influenced by the person's direct experience of the object of attitude. Factors of social communication, social communication can take the form of information from someone to another person who will influence attitudes.[25,26]

The result also showed that before the intervention students who had bad behavior about cigarettes in the WhatsApp group were 84.4% and in the leaflet group were 77.8%. After the educational intervention, more students had good behavior about cigarettes 62 or 68.89% in the whatsapp group, and 61 students or 67.78% in the leaflet group. Students who have good behavior about cigarettes increase by 75.6% or 68 people through leaflet education, while education for Whats App 82.2% or 74 people.

Paired t-test results show that giving education through leaflets or Whats App will improve students' attitudes about cigarettes ($p < 0.05$). Increased attitudes about cigarettes are more on respondents who received educational intervention by Whats App compared to leaflets. This is due to the material contained in the video via Whats App which can be more quickly appreciated by students. The ease of appreciation of the material contained in the video is caused by the presentation of a video that "contains the storyline" of someone who started smoking up to the diseases he suffered. The students are able to empathize with the circumstances of the characters in the story of the video. Than his attitude about smoking will be better while in the leaflet contains some "information about cigarettes and dangers that are packaged in a straightforward manner". The respondents get additional information and can improve their understanding of smoking and its dangers.

The research done by Dian L (2013) about Mobile-Based Video Learning Smooking Effect as an anti-smoking health education media, found that the use of the "smooking effect learning" video method was quite effective. The learning media used could be accessed by various groups easily via mobile phones.[14] These teenagers will be more interested in learning more from social media, that offer not only the sound but also the picture show.[27,28,29,30,31]

Conclusion

Education through WhatsApp social media is more effective than leaflet media in increasing the knowledge, attitudes and behavior of high school students about cigarettes. It is advised to disseminate health information with whats app, leaflets and other media about the dangers of smoking to teenagers in order to reduce and stop smoking.

Acknowledgment

We would like to thank all the respondents of this research in Pangkep district, especially to the local government of Pangkep in supporting this research. The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) fully thanks to Universitas Muslim Indonesia for the financial support for the research, authorship, and/or publication of this article by the name of Internal Research Grant Funding.

Commented [U2]: Mohon tambahkan hal-hal berikut ini :
-Abbreviations
-Ethics approval and consent to participate
-Competing interest
-Availibility of data and materials
-Authors' contribution

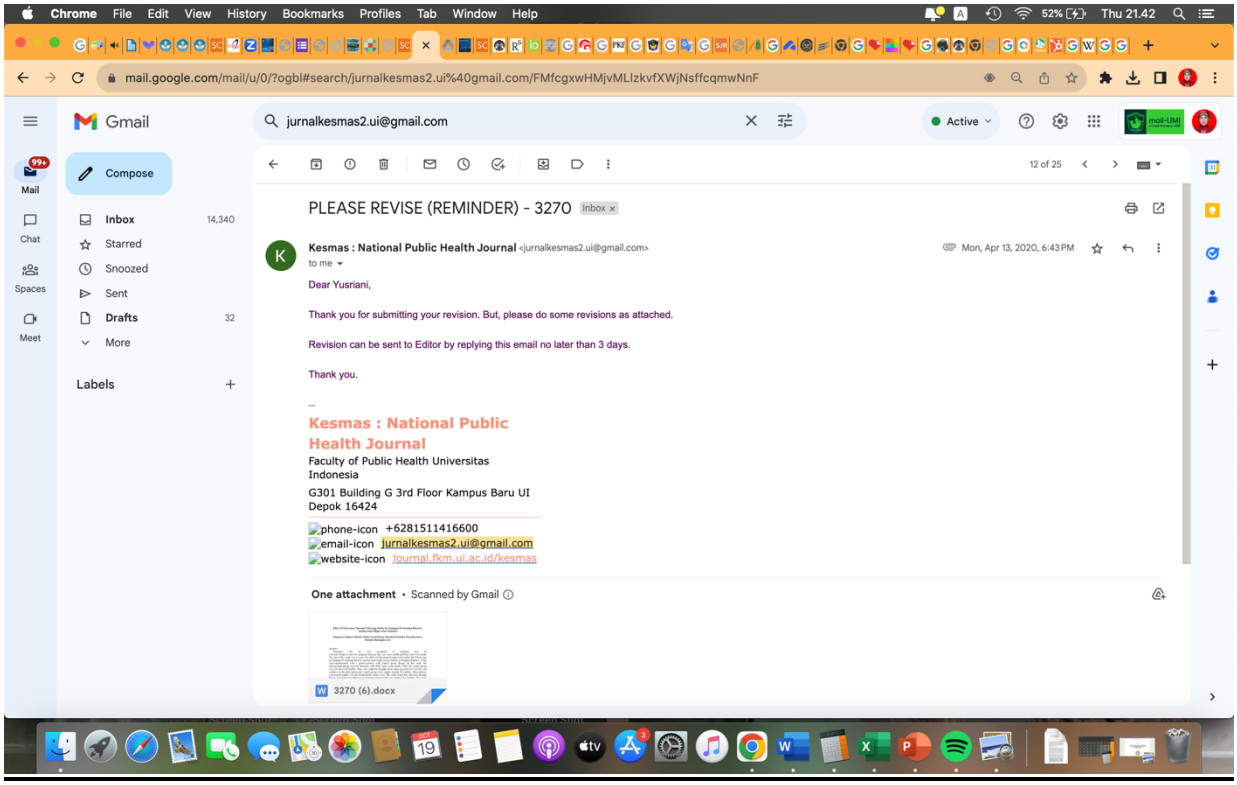
References

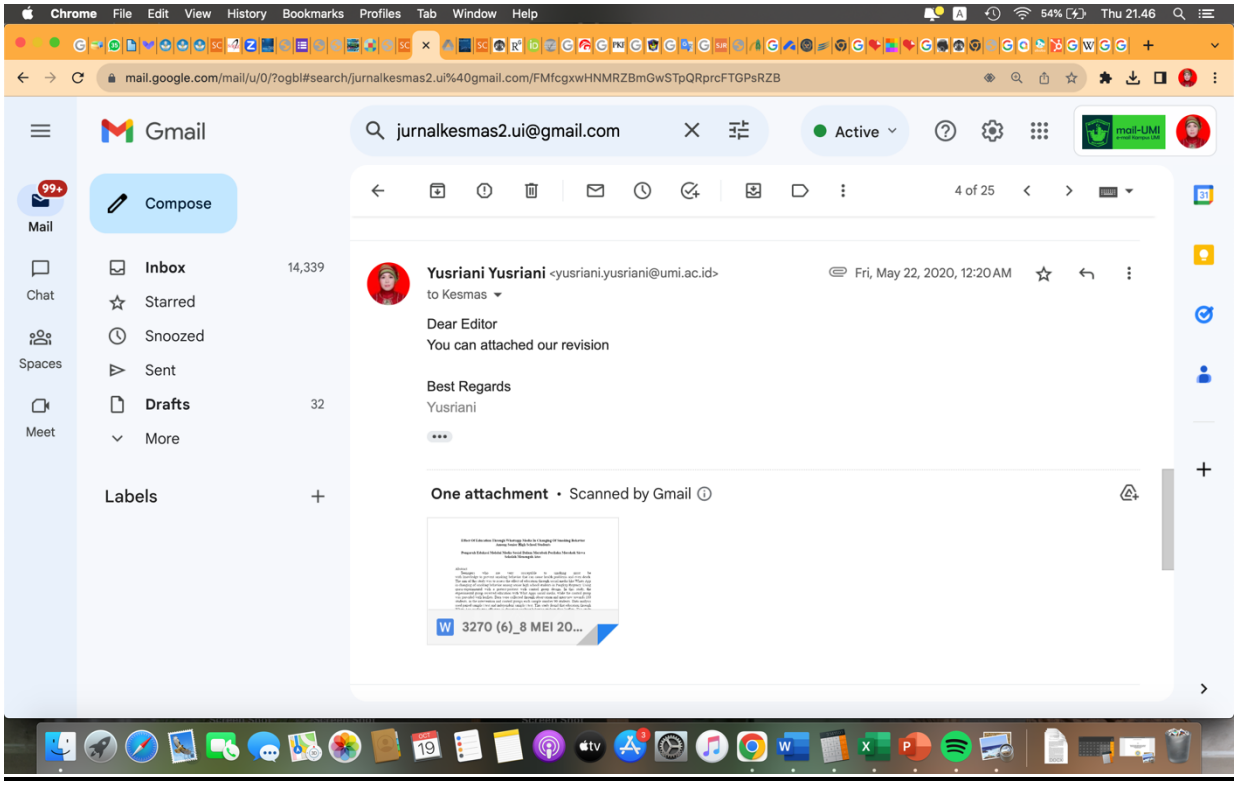
1. World Health Organization, Adolescent Development: Topics at Glance. WHO, 2015. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=13&ved=2ahUKEwi7kaH4gfnnAhUOXn0KHTQkBJsQFjAMegQIAxAB&url=https%3A%2F%2Fwww.who.int%2Fmaternal_child_adolescent%2Fdocuments%2Fpdfs%2F9241591269_op_handout.pdf&usg=AOvVaw0vABPD02FDgzUz8B5WypDP
2. Kusumawardani N, Suhardi S. Behaviour health risk among adolescents: a school-based health survey with the focus on smoking in male adolescents aged 12-15 In depok, West Java, Indonesia. Buletin Penelitian Sistem Kesehatan. 2011; 14 (4): 332-340. http://202.70.136.138/index.php/hsr/article/view/1370
3. Wantland DJ, Portillo CJ, Holzemer WL, Slaughter R, McGhee EM. The effectiveness of web-based vs. non-web-based interventions: a meta-analysis of behavioral change outcomes. *J Med Internet Res*. 2004;6(4):e40. doi:10.2196/jmir.6.4.e40.
4. Ministry of Health of The Republic of Indonesia, Data and information Center. t.t. Adolescent Reproductive Health Situation. 2017. https://pusdatin.kemkes.go.id/article/view/15090700003/situasi-kesehatan-reproduksi-

remaja.html.
5. Balitbangkes, Agency for Health Research and Development on Cigarettes and Health. 2016. http://www.litbang.kemkes.go.id.
6. Agency, C.S., Pangkep Regency Population Data 2017. 2017. http://www.pangkepkab.go.id/index.php/profil/demografi.
7. Aril, B.S.R., Quantitative Research Methodology. Mold I, 2017. http://www.yanchukvladimir.com/docs/Library/Sage%20Encyclopedia%20of%20Qualitative%20Research%20Methods-%202008.pdf.
8. Saryono, Qualitative and Quantitative Research Methodology in the Field of Health. 2013. https://www.tokopedia.com/pustakahidayah/metodologi-penelitian-kualitatif-dan-kuantitatif-dr-saryono.
9. Ambarwati A, Umaroh AK, Kurniawati F, Kuswandari TD, Darojah S. Media Leaflet, Video Dan Pengetahuan Siswa Sd Tentang Bahaya Merokok (Studi Pada Siswa Sdn 78 Sabrang Lor Mojosongo Surakarta). KEMAS: Jurnal Kesehatan Masyarakat. 2014; 10 (1): 7-13. http://id.portalgaruda.org/index.php?ref=browse&mod=viewarticle&article=261799.
10. Ristin, E., Effectiveness of health promotion with leaflet and video media on adolescent knowledge. 2016. http://repositori.usu.ac.id/bitstream/handle/123456789/735/147032119.pdf?sequence=1&isAllowed=y.
11. Ma, S., Effect of adolescent smoking prevention programs: influence of smoking prevention programs among public high school students in the city of Paranaque, Fhilipinja Soulivanh. 2010: National Public Health Institute, Japan. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwiamtmnsvrnAhVMfSsKHcfHB5MQFjAAegQIARAB&url=https%3A%2F%2Firis.wpro.who.int%2Fbitstream%2Fhandle%2F10665.1%2F13140%2FRS_2015_GE_23_PHL_eng.pdf&usg=AOvVaw1SWkCylB9cqS32EgXSNhZf.
12. Andrian, L., Effect of Mass Media, Family, and Friends on Youth Smoking Behavior in Yogyakarta. Makara Hubs-Asia, 2014, 18 (1): 41-52 DOI: 10.7454 / mssh.v18il.3460. 2014.
13. R, K., Factors Associated with Smoking Behavior at Home in Jorong Ganting Ateh Nagari Tantung Alam Community. STIKES Prima Nusantara Health Journal Bukit Tinggi, 2014. 6. http://id.portalgaruda.org/?ref=browse&mod=viewarticle&article=495965.
14. Jennifer C. Duke, Kevin C. Davis, Robert L. Alexander, Anna J. MacMonegle, Jami L. Fraze, Robert M. Rodes, Diane M. Beistle, Impact of a U.S. antismoking national media campaign on beliefs, cognitions and quit intentions, *Health Education Research*, 2015; 30 (3): 466–483, https://doi.org/10.1093/her/cyv017.
15. Kaplan, A.M.M.H., "Users of The World, unite! “Challenges and opportunities of Social Media”. Business Horizons 53, 2010. 1: p. 59-68. http://openaccess.bilgi.edu.tr:8080/xmlui/bitstream/handle/11411/1490/Collaborative%20approaches%20to%20heritage%20museums%20on%20web%202.0%20platforms.pdf?sequence=1&isAllowed=y.
16. Yoo W, C.D., Park K, The effects of SNS communication: How to express and accept MERS-preventive behavioral intentions in South Korea. Computers in Human Behavior. 2016; 62: 34–43. doi: 10.1016 / j.chb.2016.03.058.
17. JE, C., Antismoking campaign videos on YouTube and audience response: Application of social media assessment metrics. Computers in Human Behavior. 2015; 51: 114–121. doi: 10.1016 / j.chb.2015.04.061.
18. Cunningham JA, S.P., Implications of the fallacy in young adult smokers aged 19-24 years. American Journal of Public Health, 2017. 97(8): p. 1399–1400. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1931445/.
19. De Viron S, S.L., Brand A, Van Oyen H, Communicating genetics and smoking through social media. Journal of Medical Internet Research, 2013. 15(9): p. 198. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3785980/.
20. Depue JB, S.B., Betzner AE, Walsh BM, Encoded exposure to tobacco use in social media predicts subsequent smoking behavior. American Journal of Health Promotion, 2015.

29(4): p. 259-261. https://journals.sagepub.com/doi/pdf/10.4278/ajhp.130214-ARB-69.
21. I, A., From intentions to actions: A theory of planned behavior. In: Kuhl J, Beckman J, editors. Action-control: From cognition to behavior. Heidelberg, Germany: Springer; 2015. pp. 11–39. https://www.springer.com/gp/book/9783642697487.
22. Ajzen I, F.M., Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall, 2010. https://www.worldcat.org/title/understanding-attitudes-and-predicting-social-behavior/oclc/699599135?referer=di&ht=edition.
23. A, B., Social cognitive theory of mass communication. Media Psychology, 2011. 3(3): p. 265–299. https://doi.org/10.1207/S1532785XMEP0303_03.
24. Bernhard U, D.M., Vowe G, Do presumed online media effects have influence on online activities of politicians? Policy & Internet. . 2015. 8(1): p. 72-90. https://onlinelibrary.wiley.com/doi/full/10.1002/poi3.108.
25. Yusriani, Yusriani, and Muhammad Khidri Alwi. "Buku ajar promosi kesehatan dan pemberdayaan masyarakat." (2018): 1-59. https://forikes-ejournal.com/index.php/index/index.
26. Murphy-Hoefer R, H.A., Rivard C, The influence of tobacco countmarking ads on college students' knowledge, attitudes, and beliefs. Journal of American College Health, 2010. 58(4): p. 373-381. https://www.ncbi.nlm.nih.gov/pubmed/20159761.
27. Paek HJ, G.A., McLeod DM, Hove T, How adolescents' perceived influence media on peers affects smoking decisions. Journal of Consumer Affairs, 2011. 45(1): p. 123-126. http://www.mariskakret.com/wp-content/uploads/2015/10/Kret_Springer_2010.pdf.
28. Yusriani, Yusriani., Effective audio visual aids change the behavior of elementary school students in maintaining dental. Indian Journal of Public Health Research and Development, 2019. 10 (3) p. 584-588. http://www.indianjournals.com/ijor.aspx?target=ijor:ijphrd&volume=10&issue=3&article=119.
29. Shmueli D, P.J., Glantz SA, The effect of smoking is a randomized controlled study. American Journal of Preventive Medicine, 2010. 38(4): p. 351–358. https://www.ncbi.nlm.nih.gov/pubmed/20307802.
30. J, P., Participating in health issue-specific social networking sites to quit smoking: How does social interconnection influence smoking cessation self-efficacy? Journal of Communication, 2013. 63: p. 933-952. https://onlinelibrary.wiley.com/doi/abs/10.1111/jcom.12054.
31. Yusriani, Muh. Khidri Alwi, Heru Santoso Wahito Nugroho. The Effect of Training on Efforts to Reduce Maternal Mortality Risk to Behavior of Community-Based Safe Motherhood Promoters (SMPs). Indian Journal of Public Health Research and Development, 2018. 9 (11) p. 398-404. http://www.indianjournals.com/ijor.aspx?target=ijor:ijphrd&volume=9&issue=11&article=064.

REVIEW 5


Gmail
jurnalkesmas2.ui@gmail.com
Compose
Inbox 14,340
Starred
Snoozed
Sent
Drafts 32
More
Labels
PLEASE REVISE (REMINDER) - 3270
Kesmas : National Public Health Journal <jurnalkesmas2.ui@gmail.com>
Mon, Apr 13, 2020, 6:43 PM
Dear Yusriani,
Thank you for submitting your revision. But, please do some revisions as attached.
Revision can be sent to Editor by replying this email no later than 3 days.
Thank you.
Kesmas : National Public Health Journal
Faculty of Public Health Universitas Indonesia
G301 Building G 3rd Floor Kampus Baru UI Depok 16424
phone-icon +6281511416600
email-icon jurnalkesmas2.ui@gmail.com
website-icon journal.fkm.ui.ac.id/kesmas
One attachment • Scanned by Gmail
3270 (6).docx


Gmail
jurnalkesmas2.ui@gmail.com
Compose
Inbox 14,339
Starred
Snoozed
Sent
Drafts 32
More
Labels
Yusriani Yusriani <yusriani.yusriani@umi.ac.id>
Fri, May 22, 2020, 12:20 AM
to Kesmas
Dear Editor
You can attached our revision
Best Regards
Yusriani
One attachment • Scanned by Gmail
3270 (6)_8 MEI 20...

HASIL REVIEW SUBSTANSI "5"

Effect Of Education Through Whatsapp Media In Changing Of Smoking Behavior Among Senior High School Students

Pengaruh Edukasi Melalui Media Sosial Dalam Merubah Perilaku Merokok Siswa Sekolah Menengah Atas

Abstract

Teenagers who are very susceptible to smoking must be with knowledge to prevent smoking behavior that can cause health problems and even death. The aim of this study was to assess the effect of education through social media like Whats App in changing of smoking behavior among senior high school students in Pangkep Regency. Using quasi-experimental with a pretest-posttest with control group design. In this study, the experimental group received education with What Apps social media, while the control group was provided with leaflets. Data were collected through observation and interview towards 180 students, in the intervention and control groups each sample number 90 students. Data analysis used paired sample t test and independent sample t test. This study found that education through Whats App media was effective in changing smoking behavior students than leaflets. This study suggested to disseminate health information with whats app about the dangers of smoking to teenagers in order to reduce and stop smoking.
Keywords: Behavior, smoking, whatsapp, leaflets, students.

Introduction

Teenagers who are the younger generation who will determine the fate of the nation in the future. A quality generation is absolutely necessary, despite in reality social change and a more modern lifestyle in the society tend to also increase various problems in the life of the younger generation. This is due to teenagers experiencing a transition period where they always want to try various things that are considered modern and do not want to miss, an easily affected and want to appear and be accepted in their environment. Many of these behaviors can bring risks to health such as smoking, drinking alcoholic beverages, drugs or premarital sexual behavior. Adolescents who are the next generation of nation-building who must be prepared as well as possible, an related to that various problems, especially during high school age that are very vulnerable to behaviors such as smoking and drinking. They must be equipped with knowledge and change their attitudes to be able to prevent risky and avoid bad impact towards their health and future.[1] The high number of smokers among high school students is caused by the lack of knowledge about the dangers of smoking, so it is necessary to educate using whatsapp media, in this case teenagers will be more interested in learning more from whatsaapp media which not only sound but also the picture shown.

Research conducted about health risk behaviors among middle and high school students in Indonesia found that the main risk behaviors that bring about health problems for the middle and high school students were smoking, breakfast, physical violence and alcohol consumption.[2] Research conducted at the Surakarta Vocational School who stated effects of health education on the dangers of smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, stop smoking habits and avoid smoking, health education is needed. Health education achieve goals through changes in adolescent behavior.[3]

Based on WHO data in 2016 the percentage of smokers in ASEAN countries for Indonesia (46.16%), Philippines (16.62%), Vietnam (14.11%), Myanmar (8.73%), Thailand (7.74%), Malaysia (2.9%), Cambodia (2.07%), Laos (1.23%), Singapore (0.39%), and Brunei (0.04%).[4] Smoking prevalence rates among men remain generally higher than those of women, with Indonesia facing very high prevalence rates (above 64%) among their male pupulation, while Lao PDR, Malaysia, Myanamar, Philippines, and Vietnam have male smoking rates nearing 50%. It should be pointed out that in addition to the health burden from smoking, Myanmar Cambodia and Lao PDR also face significant "Smokeless tobacco" use. Furthermore, from a public health perspective, there is a distressing trend of increasing consumption in Indonesia, Myanmar, and, most alarming, Vietnam.[4]

In Indonesia, smoking is one of the habits of the community because the smoking prevalence

rate tends to remain high, especially in men. In this case the government including the Ministry of Health together with other relevant ministries has sought to be able to control this smoking habit through various strategies and approaches. Government policy for tobacco control has been outlined in Government Regulation No. 109 of 2013. In the Government Regulation it clearly regulates cigarette advertisements, areas without cigarettes, and access to cigarettes to vulnerable groups in the community. In addition, the Ministry of Health in collaboration with related sectors has also implemented smoking prevention efforts, through smoking cessation programs and providing health education on the dangers of smoking, as well as other approaches at the community level, public facilities, schools, workplaces and groups. other populations.[5]

Based on data from the Central Bureau of Statistics of Pangkajene Kepulauan Regency in 2017 which consists of land and several islands that the population of Pangkajene Kepulauan Regency is 353,428 people with the number of adolescents aged 11-21 years around 35% of the population.[6] Pangkajene and Kepulauan Regency are one of the Regencies in South Sulawesi Province, with the capital being Pangkajene. Pangkep Regency initially had an area of 1112.29 Km2, after a joint analysis of Bakosurtanas the area was revised to 12,362.73 Km2 with a land area of 898.29 Km2 and a sea area of 11,464.44 Km2.

Based on the initial survey by distributing questionnaires to grade 2 students as many as 100 people at the Muhammadiyah Bungoro Public High School and 100 people at Pangkajene DDI Senior High School in Pangkep District who were present at the Muhammadiyah Bungoro High School were 85 students who had smoking habits, as many as 60 students smoked spend one pack (12 sticks) every day and 25 students spend 6 cigarettes a day, 57 students usually smoke in school and 28 only smoke outside the school environment. While in Pangkajene DDI Senior High School there were 93 students who had smoking habits, 53 students spent one pack (12 sticks) every day and 40 students spent 6 cigarettes per day, 60 students used to smoke in school and 33 only smoke outside the school.

Based on the supporting data obtained from the Counseling Guidance teacher during the last 3 months (June-August) that there were 47 students who committed school violations by smoking in the school environment. While in Pangkajene DDI Senior High School there were 43 students who committed school violations by smoking in the school environment. Students smoke in the school environment because there are no strict rules from the school regarding smoking bans, they also do not know about the dangers of smoking in the school environment. They have never received education in schools about the dangers of smoking.

Smoking behavior generally occurs in Private High Schools including Bungoro Muhammadiyah Senior High School and Pangkajene DDI Senior High School. Pangkep Regency as a place chosen by researchers because of the numbers Teen smokers in these schools are very high due to low knowledge and have never been touched by education both in the school and family environment. So that researchers provide education for students who have a habit of smoking through WhatsApp media for Bungoro Muhammadiyah Senior High School and leaflets for Pangkajene DDI Senior High School. So, the aim of this study was to assess the effect of education through the Whats App media on changes in smoking behavior in senior high school students in Pangkep Regency.

Method

The type of research used was quasi-experiment with a pretest-posttest design only control group design which is a study that determines the treatment (intervention) in the experimental group by comparing with the control group.[7,8] In this study, the experimental group received education with What Apps social media, while the control group was given education with leaflet media. Before the intervention, the pretest was performed in both groups. After giving the intervention, posttest was then carried out. This study uses questionnaires, a data collection techniques that are carried out by giving a set of questions or statements written to the respondent to answer by sharing with each respondent at the pretest and posttest. The population in this study were 330 grade 2 students enrolled in the Muhammadiyah Bungoro High School and Pangkajen DDI High School in Pangkep Regency. Data were collected through observation and interview to 180 respondents. The respondents in the control group were 90 and in the intervention group 90 students.

Selection of respondents used purposive sampling method based on the criteria of inclusion and exclusion. The inclusion criteria are criteria or standards set before the study that are used to

determine whether a person can participate in a research study. The inclusion criteria used in this study are as follows: Class 2 male students who were registered and actively participated in learning in the last three months at the Muhammadiyah Bungoro and DDI Pangkajene High Schools in Pangkep Regency, Students who have Mobile phone and Whats App, Students who are willing became the respondent in this study by answering questions in the questionnaire and filling observation sheet. Exclusion criteria or exclusion criteria are criteria set before the study used to determine whether to participate or must be excluded. Data analysis paired sample t test and independent sample t test, because the data were normally distributed.

To simplify the research process, the researcher presents a series of activities during the research process, in the preparation Phase by determining and making research schedules, determining research assistants and preparing the material to be delivered. Consists of understanding towards cigarettes, hazardous substances and the dangers posed by cigarettes both for health and economic aspects and the impact on passive smoking. In the implementation phase, the initial stages of the implementation, is first open the greeting, do the introductory stage, open the class with prayers led by the class leader, and attend the attendees and those who are unable to attend, and the researcher explains the purpose of arrival, purpose, topic and description about the material that will be brought.

Steps for Health Education through the Media Whats App, are preparing material and supporting media. This material can be short messages, pictures or videos that contain invitations and appeals, provide pre-test, explain the purpose and topic of the meeting to the respondent, save student cellphone numbers become a sample (respondent), Create a Whats App group which is named the Respondent of SMKS Muhammadiyah Bungoro, Share health information in the form of health messages in the form of narrative texts, posters, pictures, or in audiovisual forms related to cigarette material. Performed for 1 week given at day and night regularly every day. At the final stage, is to do the post test by distributing the same questionnaire during the pre-test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after the health education intervention is given through the media Whats App.

Educational steps through Leaflet media are component preparing material and supporting media, providing pre-test, explaining the purpose and topic of the meeting to the respondent, distributing leaflets to each respondent with the help of research assistants and ensuring leaflets are evenly distributed, reciting the contents of the leaflets has been distributed and suggested to the respondent to listen and pay attention to the contents of the leaflet, recommend to the respondent to understand the contents of the leaflet and hope for changes in knowledge, attitudes and behavior after reading the leflet. The final stage is to perform the post test by distributing the same questionnaire during the pre test with the aim to find out whether there is a change in students' knowledge, attitudes and behavior before and after health education interventions are provided through leaflet media.

The Final Stage of this Implementation is to evaluate the results by checking respondents' answers, scoring data, tabulating research data and concluding how the level of knowledge, attitudes and behavior of students before and after being given health education through media Whats App and Leaflets. How to measure knowledge, attitudes and actions by distributing questionnaires using questionnaire measurement tools. Knowledge is the result of knowing respondents about matters relating to smoking risk behavior including the understanding of cigarettes, smoking and drinking alcohol, causative factors, the content of harmful substances and the negative impact of smoking behavior on individual health, learning achievement, environmental and social. While the act of smoking is an activity caused by addiction. When someone takes out a pack of cigarettes from his pocket and then takes a bar and turns it on, basically the activity is a series of commands from the brain caused by the addiction of certain addictive substances.

Knowledge and action questions are given two answer criteria namely YES or NO using the Guttman scale where if YES score = 1, if NO score = 0. Knowledge or action is said to be good If the respondent answers correctly $\geq$ 50% of all questions. While Knowledge or action is said to be lacking if the respondent answers correctly <50% of all questions.

Attitude variable is student response or response about risk behavior in the form of smoking behavior. Consists of 4 answer option statements with each score, SS (Strongly Agree) = 1, S (Agree) = 2, TS (Disagree) = 3, STS (Strongly Disagree) = 4. The sum of all statements is 10 so

that the number of possible scores is obtained if the respondent's answer score is ,5 62.5% and it is said to be negative if the respondent's answer score <62.5%.

To find out whether there is a decrease or increase in students' knowledge, attitudes and actions, the results of the knowledge score, attitudes and actions during the post test are reduced by the results of the score of knowledge, attitudes and actions during the pre test. If the results of the difference in the score of knowledge, attitudes and pre-post test experiences a positive change means an increase, vice versa if the difference between the results of the score of knowledge, attitudes and actions during the pre-post test is negative, then the knowledge, attitudes and actions have decreased. As for the results of the difference in the score of knowledge, attitudes and actions pre-post test did not experience positive and negative changes or the result is zero (0) means that the students' knowledge, attitudes and actions remain unchanged.

This study has been approved by the Health Research Ethics Commission of the Universitas Muslim Indonesia and the Ibnu Sina Hospital YW-UMI Makassar Number: 058/A.1/KEPK-UMI/V/2018.

Results

The results showed that researchers did some preparation stage consists of (1) Determine and schedule research. (2) Determine research assistants according to predetermined requirements, namely those who know about the condition of students and the school environment under study, namely one of the school teachers who teach in the school under study. (3) Prepare material to be brought. (4) Prepare leaflets about the dangers of smoking. Preparing material in the form of theories, pictures and visual audio about smoking risk behavior which consists of: the understanding of cigarettes, the content of harmful substances of cigarettes and the dangers arising from smoking both for health and economic aspects and the impact for passive smokers.

Implementation phase: In the initial stages of the implementation, first opening with greetings, introducing the stage, opening the class with a prayer led by the class leader, and attend both attendees and those unable to attend, and researchers explain the purpose of arrival, goals, topics and a description of material to be brought.

Steps to Health Education through Whats App Media consists of: (1) Prepare material and supporting media. Material that will be given to respondents is material about cigarettes, namely: the content of hazardous substances from cigarettes, the dangers that will arise from smoking habits in terms of health, economy and environmental impact and people around it. This material can be in the form of short messages, pictures or videos that contain the meaning of solicitation and appeal. (2) Give a pre test, Distribute questionnaires to each respondent to determine the level of knowledge and attitudes of respondents before being given education through the Whats App media. Respondents were given the opportunity to fill out questionnaires within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents. The purpose of this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes in terms of health, economic losses, and impacts on the social environment. (4) Save the handphone number of the student who is the sample (respondent). (5) Create a Whats App group named Muhammadiyah Bungoro SMKS Respondents and Pangkajene DDI SMAS Respondents. (6) Share health information in the form of health messages like in the form of narrative texts, posters, pictures, or in the form of audiovisual related material cigarettes. Performed for 1 week given at the time of the day and night on a regular basis every day. (7) Evaluation. The final stage is to conduct a post test by distributing the same questionnaire during the pre test in order to find out if there are changes in students' knowledge and attitudes before and after they are given health education interventions through the Whats App media.

Educational steps through the Leaflet media consists of: (1) Prepare material and supporting media. Prepare leaflets containing material about cigarettes. The material to be given to respondents is material about cigarettes, namely: the content of hazardous substances from cigarettes, the danger that will arise from smoking habits in terms of health, economic and social.

(2) Give a pre test. Distribute questionnaires to each respondent to find out the level of knowledge and attitudes of respondents before being given education through the Leaflet media. Respondents were given the opportunity to fill out questionnaires within 5-10 minutes. (3) Explain the purpose and topic of the meeting to respondents The purpose of carrying out this activity is to increase students' knowledge and attitudes towards risk behaviors such as smoking. Topics to be discussed at this meeting are about the definition of cigarettes, the content of hazardous substances they contain and the dangers arising from cigarettes both in terms of health, economic losses, and impacts on the social environment. (4) Distribute leaflets to each respondent with the help of research assistants and ensure the leaflets are evenly distributed. (5) Read back the contents of the leaflet that has been distributed and encourage respondents to listen and pay attention to the contents of the leaflet. (6) Encourage respondents to understand the contents of the leaflet and hope for a change in knowledge and attitudes after reading the leflet. (7) Encourage respondents to bring back the leaflets that were distributed one week later at the time of the evaluation. (8) Evaluation. The final stage is to do a post test by distributing the same questionnaire at the time of the pre test with the aim to find out if there are changes in students' knowledge and attitudes before and after the health education intervention is given through leaflet media.

The Final Stage of the Implementation is to evaluate the results of check the respondent's answer, perform data scoring, tabulate research data and see and conclude how the level of knowledge and attitudes of adolescents before and after being given health education through the Whats App and Leaflet media.

Results of this study were obtained through primary data using a questionnaire. Processing data using the computer statistic program. Data analysis results are displayed in the following tables:

Table1. Distribution of Respondents Based on Knowledge Levels, Attitudes and Smoking Behaviors of High School Students When Pre Test and Post Test With Education Through Media WhatsApp and Leafletsin Pangkep Regency

Variable	Whats App (n=90)				Leaflet (n=90)			
	Pre test		Post test		Pre test		Post test	
	n	%	n	%	n	%	n	%
Knowledge								
Good	42	46.67	88	97.78	41	45.56	77	85.55
Less	48	53.33	2	2.22	48	54.44	13	14.45
Attitudes								
Positive	30	33.33	79	87.78	32	35.56	76	84.44
Negative	60	66.67	11	12.22	58	64.44	14	15.55
Behaviour								
Good	14	15.55	62	68.89	20	22.22	61	67.78
Less	76	84.44	28	31.11	70	77.78	29	32.22

Source :Primary Data 2018

Table 2. Distribution of Respondents Based onKnowledge Changes, Attitudes and Behavior About Cigarettes Before and After Intervention in Media Education WhatsUpp da Leaflet in Pangkep Regency

Variable changes about smoking	WhatsApp (n=90)		Leaflet (n=90)	
	n	%	n	%
Knowledge				
Increase	73	81.1	59	65.6

Variable changes about smoking	WhatsApp (n=90)		Leaflet (n=90)	
	n	%	n	%
Decrease	9	10.0	18	20.0
Remain	8	8.9	13	14.4
Attitudes				
Increase	74	82.2	72	80.0
Decrease	14	15.6	14	15.6
Remain	2	2.2	4	4.4
Behaviour				
Increase	74	82.2	68	75.6
Decrease	13	14.4	18	20.0
Remain	3	3.4	4	4.4

Source :Primary Data 2018

Table 3. Education Through Media WhatsUpp and Leaflets on Average Knowledge, Attitudes and Behavior About Cigarettes in High School Students in Pangkep Regency

Variable about Cigarettes	Knowledge			Attitudes			Behaviour		
	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*	Pre test (mean±SD)	Post test mean±SD)	p*
Leaflet	4,27±1,29	6,51±1,55	0,000	24,63±6,35	31,61±4,44	0,000	4,36±1,46	6,47±1,67	0,000
Whats App	4,33±1,37	5,80±0,87	0,000	24,38±5,40	32,22±3,38	0,000	4,82±1,84	5,80±0,87	0,000
p**	0,812	0,009		0,772	0,030		0,186	0,021	

Source :Primary Data 2018 *: Paired t Test **: Independen Sample t Test

This researched showed that there are inputs/comments from the participating students related to the tobacco education content of WA and Leaflet. The comments from participating students related to the tobacco education content of WA were very varied, they were very enthusiastic and critical in giving comments. There are positive and negative comments because the material presented in whats apps varies in written and audiovisual form. Videos delivered via Whats App can be lived up to students more quickly. The ease of comprehension of the material contained in the video is due to the presentation of the video that "contains a storyline" for someone who starts smoking to the diseases he suffers. Students are able to empathize with the circumstances of the characters in the video story, so that their knowledge and attitudes about smoking will be better. Whereas The comments from the participating students related to the tobacco education content of the leaflet were very few and tended to be one-way, students simply read information in the leaflet and there was no response because the leaflet contained information that was packaged in writing without a video that was more tangible in sight and applied in everyday life.

Discussion

The intervention is haalth education using leaflets and Whats App. The material given to students is material about cigarettes, such as the content of harmful substances from cigarettes, the danger that will be caused by smoking habits both in terms of health, economy and environmental impact and the people around them.

Media Whats App was chosen because it is a message-based application for Smathpone which is a cross-platform messaging application that allows users to exchange messages using internet data packages. The use of whatsapp allows students to receive information through audio, visual and audiovisual media. Whereas Leaflet is a piece of paper containing writing in short, concise sentences, easy to understand and pictures that are simple, interesting and there are some that are presented in folded sheets of paper. Laflet only allows students to receive information visually.

Before the intervention about a half of the respondent in the leaflet group had less knowledge about cigarettes (54.4%), and after the educational intervention, more students had better knowledge about cigarettes were 77 students (85.55%). Students knowledge about cigarettes are increased 59 or 65.6% through leaflet education. The results showed that the group of students who were educated through the media leaflets also experienced an increase in knowledge, this happened because in the media leaflets the message was written clearly, and could be read repeatedly by students. While on Whats App media there is a tendency for students to only read messages once and messages in video form, students only enjoy the storyline on the video but are less able to capture the messages implicit in the video story.

Paired t-test results show that giving education through leaflets or Whats App will increase students' knowledge, attitudes and actions about smoking. Increased knowledge, attitudes and actions about cigarettes more on students who received educational intervention by Whats App compared to leaflets. The use of WhatsApp media is more effective as a health education media compared to leaflet media in increasing knowledge. The results showed that before the intervention whatsapp media the respondent had less knowledge about cigarettes were 53.33% and after the educational intervention, more students had better knowledge about cigarettes were 88 students (97.78%). Students knowledge about cigarettes are increased 73 or 81.1% through Whats App. This is because whats app messages delivered are clearly written, two-way and can be read repeatedly, and equipped with sounds and images. In addition, students are easier to access if needed because students can open whats app every time. While in the leaflet media there is a tendency for students to only read the message once, and the leaflet is usually quickly lost, scattered cause the students cannot reread and understand more, besides the leaflets are one-way.

This study are in accordance with the study which stated that video media was more effective in increasing students' knowledge about the dangers of smoking compared to leaflets.[9] The same study also concluded that there was an influence of health education on knowledge about the dangers of smoking in adolescents.[10,11,12,13,14,15] In addition, some research results also concluded that with health education through social media about danger smoking has been shown to reduce cigarette consumption in adolescents.[16,17,18,19,20]

The results of this study are not in line with the research conducted on the effectiveness of health promotion with leaflet and video media on adolescent knowledge indicating that adolescent knowledge is sufficient, a good attitude after receiving counseling about smoking behavior.[10.]

A study conducted at the Surakarta Vocational School on the Effect of Health Education on cigarette smoking in adolescents revealed that to increase adolescent knowledge and attitudes about the dangers of smoking, health education is expected to stop smoking habits and avoid smoking health education is needed to change their awareness or increase adolescent knowledge about health care and improvement. Health education in achieves goals among teenegers change process in adolescent behavior.[3]

Attitude and behavior is a collection of symptoms or sindroma in response to a stimulus or an object. It involves thoughts, feelings, attention, and other psychiatric symptoms. [21,22]

Changes that occur in the respondent as a result of exposure to messages and information conveyed through health education, namely in the form of changes in behavior and attitudes that begin with changes in individual knowledge. The higher the knowledge of individual attitudes the more positive and the lower the knowledge, the more negative the attitudes and behavior of individuals.[23,24]

This study showed that before the intervention many students had negative attitudes about smoking, 66.67% in the WhatsApp group and 64.4% in the leaflet group. After the educational intervention, more students had positive attitude about smoking, 79 or 87.78% in the whatsapp group, and 76 or 84.44% in the leaflet group. Students who have a positive attitude about smoking increase through leaflet education are 68 people (75.6%), while through Whats App are 74 people (82.2%).

The attitude formation is influenced by several factors, such as physiological factors, experience factors, and social communication factors. A person's physiological factors will determine how a person behaves. Physiological factors related to age and health. Young people usually have a more free and courageous attitude compared to old age. People who are often sick or in sick condition will have an attitude that depends on others. Experience factors, a person's attitude will be influenced by the person's direct experience of the object of attitude. Factors of

social communication, social communication can take the form of information from someone to another person who will influence attitudes.[25,26]

The result also showed that before the intervention students who had bad behavior about cigarettes in the WhatsApp group were 84.4% and in the leaflet group were 77.8%. After the educational intervention, more students had good behavior about cigarettes 62 or 68.89% in the whatsapp group, and 61 students or 67.78% in the leaflet group. Students who have good behavior about cigarettes increase by 75.6% or 68 people through leaflet education, while education for Whats App 82.2% or 74 people.

Paired t-test results show that giving education through leaflets or Whats App will improve students' attitudes about cigarettes ($p < 0.05$). Increased attitudes about cigarettes are more on respondents who received educational intervention by Whats App compared to leaflets. This is due to the material contained in the video via Whats App which can be more quickly appreciated by students. The ease of appreciation of the material contained in the video is caused by the presentation of a video that "contains the storyline" of someone who started smoking up to the diseases he suffered. The students are able to empathize with the circumstances of the characters in the story of the video. Than his attitude about smoking will be better while in the leaflet contains some "information about cigarettes and dangers that are packaged in a straightforward manner". The respondents get additional information and can improve their understanding of smoking and its dangers.

The research done about Mobile-Based Video Learning Smooking Effect as an anti-smoking health education media, found that the use of the "smooking effect learning" video method was quite effective. The learning media used could be accessed by various groups easily via mobile phones.[14] These teenagers will be more interested in learning more from social media, that offer not only the sound but also the picture show.[27,28,29,30,31]

Conclusion

Education through WhatsApp social media is more effective than leaflet media in increasing the knowledge, attitudes and behavior of high school students about cigarettes. It is advised to disseminate health information with whats app, leaflets and other media about the dangers of smoking to teenagers in order to reduce and stop smoking.

Abbreviations

WHO: World health organization; ASEAN: Association of Southeast Asian Nations; UMI: Universitas Muslim Indonesia; YW: Yayasan Wakaf (Waqf Foundation); DDI: Darul Da'wah Wal Irsyad; SMKS: Sekolah Menengah Kejuruan Swasta (Private Vocational High School); SMAS: Sekolah Menengah Aliyah Swasta (Private Middle High School).

Ethics Approval and Consent to Participate

This study has been approved by the Health Research Ethics Commission of the Universitas Muslim Indonesia and the Ibnu Sina Hospital YW-UMI Makassar Number: 058/A.1/KEPK-UMI/V/2018

Competing Interest

Author declares that there are no significant competing financial, professional, or personal interests that might have affected the performance or presentation of the work described in this manuscript.

Availability of Data and Materials

The data that support the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available dueto containing information that could compromise research participant'sprivacy/consent.

Authors' Contribution

All Authors conceived of the presented idea in this manuscript. Yusriani has devised the project, the main conceptual ideas, proof outline, prepared and revised the manuscript. Joel Rey Acob was

involved in the design of the study and the data analysis. All authors read and approved the final manuscript.

Acknowledgment
We would like to thank all the respondents of this research in Pangkep district, especially to the local government of Pangkep in supporting this research. The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The author(s) fully thanks to Universitas Muslim Indonesia for the financial support for the research, authorship, and/or publication of this article by the name of Internal Research Grant Funding by Resource Research and Development Institute yaitu LP2S (Lembaga Penelitian dan Pengembangan Sumberdaya).

References

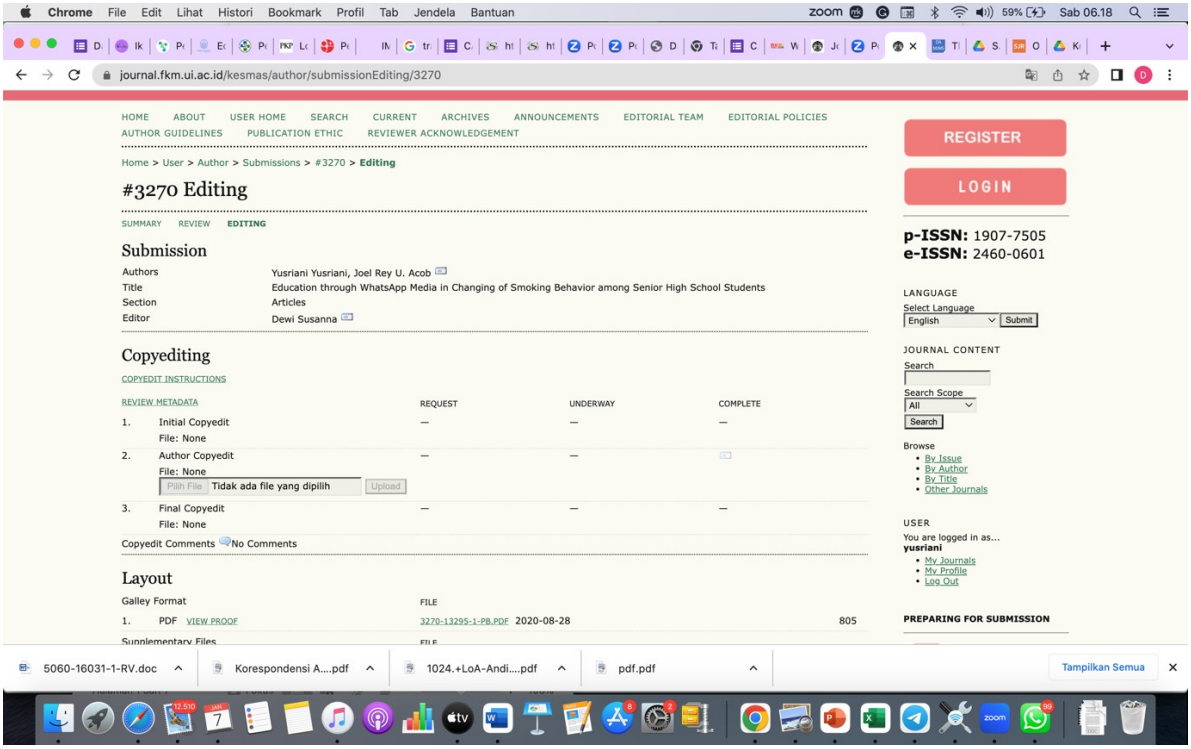
Commented [U1]: Penulisan menggunakan VANCOUVER STYLE. Beri kalimat 'Available from: .....' sebelum menulis URL/link.

1. World Health Organization, Adolescent Development: Topics at Glance. WHO, 2015. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=13&ved=2ahUKEwi7kaH4gfnnAhUOXn0KHTQkBJsQFjAMegQIAxAB&url=https%3A%2F%2Fwww.who.int%2Fmaternal_child_adolescent%2Fdocuments%2Fpdfs%2F9241591269_op_handout.pdf&usg=AOvVaw0vABPD02FDgzUz8B5WypDP
2. Kusumawardani N, Suhardi S. Behaviour health risk among adolescents: a school-based health survey with the focus on smoking in male adolescents aged 12-15 In depok, West Java, Indonesia. Buletin Penelitian Sistem Kesehatan. 2011; 14 (4): 332-340. http://202.70.136.138/index.php/hsr/article/view/1370
3. Wantland DJ, Portillo CJ, Holzemer WL, Slaughter R, McGhee EM. The effectiveness of web-based vs. non-web-based interventions: a meta-analysis of behavioral change outcomes. *J Med Internet Res*. 2004;6(4):e40. doi:10.2196/jmir.6.4.e40.
4. Ministry of Health of The Republic of Indonesia, Data and information Center. t.t. Adolescent Reproductive Health Situation. 2017. https://pusdatin.kemkes.go.id/article/view/15090700003/situasi-kesehatan-reproduksi-remaja.html.
5. Balitbangkes, Agency for Health Research and Development on Cigarettes and Health. 2016. http://www.litbang.kemkes.go.id.
6. Agency, C.S., Pangkep Regency Population Data 2017. 2017. http://www.pangkepkab.go.id/index.php/profil/demografi.
7. Aril, B.S.R., Quantitative Research Methodology. Mold I, 2017. http://www.yanchukvladimir.com/docs/Library/Sage%20Encyclopedia%20of%20Qualitative%20Research%20Methods-%202008.pdf.
8. Saryono, Qualitative and Quantitative Research Methodology in the Field of Health. 2013. https://www.tokopedia.com/pustakahidayah/metodologi-penelitian-kualitatif-dan-kuantitatif-dr-saryono.
9. Ambarwati A, Umaroh AK, Kurniawati F, Kuswandari TD, Darojah S. Media Leaflet, Video Dan Pengetahuan Siswa Sd Tentang Bahaya Merokok (Studi Pada Siswa Sdn 78 Sabrang Lor Mojosongo Surakarta). KEMAS: Jurnal Kesehatan Masyarakat. 2014; 10 (1): 7-13. http://id.portalgaruda.org/index.php?ref=browse&mod=viewarticle&article=261799.
10. Ristin, E., Effectiveness of health promotion with leaflet and video media on adolescent knowledge. 2016. http://repositori.usu.ac.id/bitstream/handle/123456789/735/147032119.pdf?sequence=1&isAllowed=y.
11. Ma, S., Effect of adolescent smoking prevention programs: influence of smoking prevention programs among public high school students in the city of Paranaque, Fhilipinja Soulivanh. 2010: National Public Health Institute, Japan. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=2ahUKEwiamtmnsvrnAhVMfSsKHcfHB5MQFjAAegQIARAB&url=https%3A%2F%2Firis.wpro.who.int%2Fbitstream%2Fhandle%2F10665.1%2F13140%2FRS_2015_GE_23_PHL_eng.pdf&usg=AOvVaw1SWkCylB9cqS32EgXSNhZf.
12. Andrian, L., Effect of Mass Media, Family, and Friends on Youth Smoking Behavior in

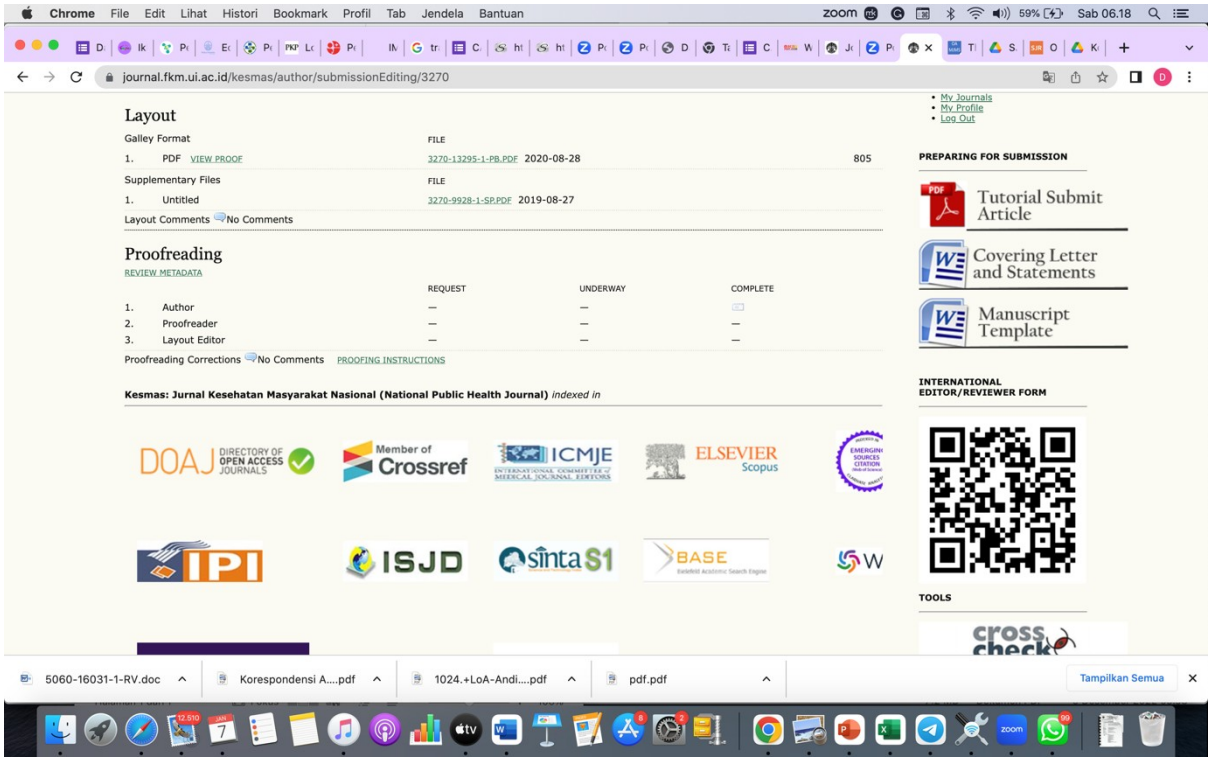
Yogyakarta. Makara Hubs-Asia, 2014, 18 (1): 41-52 DOI: 10.7454 / mssh.v18il.3460. 2014.
13. R, K., Factors Associated with Smoking Behavior at Home in Jorong Ganting Ateh Nagari Tantung Alam Community. STIKES Prima Nusantara Health Journal Bukit Tinggi, 2014. 6. http://id.portalgaruda.org/?ref=browse&mod=viewarticle&article=495965.
14. Jennifer C. Duke, Kevin C. Davis, Robert L. Alexander, Anna J. MacMonegle, Jami L. Fraze, Robert M. Rodes, Diane M. Beistle, Impact of a U.S. antismoking national media campaign on beliefs, cognitions and quit intentions, *Health Education Research*, 2015; 30 (3): 466–483, https://doi.org/10.1093/her/cyv017.
15. Kaplan, A.M.M.H., "Users of The World, unite! "Challenges and opportunities of Social Media". Business Horizons 53, 2010. 1: p. 59-68. http://openaccess.bilgi.edu.tr:8080/xmlui/bitstream/handle/11411/1490/Collaborative%20approaches%20to%20heritage%20museums%20on%20web%202.0%20platforms.pdf?sequence=1&isAllowed=y.
16. Yoo W, C.D., Park K, The effects of SNS communication: How to express and accept MERS-preventive behavioral intentions in South Korea. Computers in Human Behavior. 2016; 62: 34–43. doi: 10.1016 / j.chb.2016.03.058.
17. JE, C., Antismoking campaign videos on YouTube and audience response: Application of social media assessment metrics. Computers in Human Behavior. 2015; 51: 114–121. doi: 10.1016 / j.chb.2015.04.061.
18. Cunningham JA, S.P., Implications of the fallacy in young adult smokers aged 19-24 years. American Journal of Public Health, 2017. 97(8): p. 1399–1400. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1931445/.
19. De Viron S, S.L., Brand A, Van Oyen H, Communicating genetics and smoking through social media. Journal of Medical Internet Research, 2013. 15(9): p. 198. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3785980/.
20. Depue JB, S.B., Betzner AE, Walsh BM, Encoded exposure to tobacco use in social media predicts subsequent smoking behavior. American Journal of Health Promotion, 2015. 29(4): p. 259-261. https://journals.sagepub.com/doi/pdf/10.4278/ajhp.130214-ARB-69.
21. I, A., From intentions to actions: A theory of planned behavior. In: Kuhl J, Beckman J, editors. Action-control: From cognition to behavior. Heidelberg, Germany: Springer; 2015. pp. 11–39. https://www.springer.com/gp/book/9783642697487.
22. Ajzen I, F.M., Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall, 2010. https://www.worldcat.org/title/understanding-attitudes-and-predicting-social-behavior/oclc/699599135?referer=di&ht=edition.
23. A, B., Social cognitive theory of mass communication. Media Psychology, 2011. 3(3): p. 265–299. https://doi.org/10.1207/S1532785XMEP0303_03.
24. Bernhard U, D.M., Vowe G, Do presumed online media effects have influence on online activities of politicians? Policy & Internet. . 2015. 8(1): p. 72-90. https://onlinelibrary.wiley.com/doi/full/10.1002/poi3.108.
25. Yusriani, Yusriani, and Muhammad Khidri Alwi. "Buku ajar promosi kesehatan dan pemberdayaan masyarakat." (2018): 1-59. https://forikes-ejournal.com/index.php/index/index.
26. Murphy-Hoefer R, H.A., Rivard C, The influence of tobacco countmarking ads on college students' knowledge, attitudes, and beliefs. Journal of American College Health, 2010. 58(4): p. 373-381. https://www.ncbi.nlm.nih.gov/pubmed/20159761.
27. Paek HJ, G.A., McLeod DM, Hove T, How adolescents' perceived influence media on peers affects smoking decisions. Journal of Consumer Affairs, 2011. 45(1): p. 123-126. http://www.mariskakret.com/wp-content/uploads/2015/10/Kret_Springer_2010.pdf.
28. Yusriani, Yusriani., Effective audio visual aids change the behavior of elementary school students in maintaining dental. Indian Journal of Public Health Research and Development, 2019. 10 (3) p. 584-588. http://www.indianjournals.com/ijor.aspx?target=ijor:ijphrd&volume=10&issue=3&article=119.
29. Shmueli D, P.J., Glantz SA, The effect of smoking is a randomized controlled study. American Journal of Preventive Medicine, 2010. 38(4): p. 351–358.

https://www.ncbi.nlm.nih.gov/pubmed/20307802.
30. J, P., Participating in health issue-specific social networking sites to quit smoking: How does social interconnection influence smoking cessation self-efficacy? Journal of Communication, 2013. 63: p. 933-952. https://onlinelibrary.wiley.com/doi/abs/10.1111/jcom.12054.
31. Yusriani, Muh. Khidri Alwi, Heru Santoso Wahito Nugroho. The Effect of Training on Efforts to Reduce Maternal Mortality Risk to Behavior of Community-Based Safe Motherhood Promoters (SMPs). Indian Journal of Public Health Research and Development, 2018. 9 (11) p. 398-404. http://www.indianjournals.com/ijor.aspx?target=ijor:ijphrd&volume=9&issue=11&article=064.

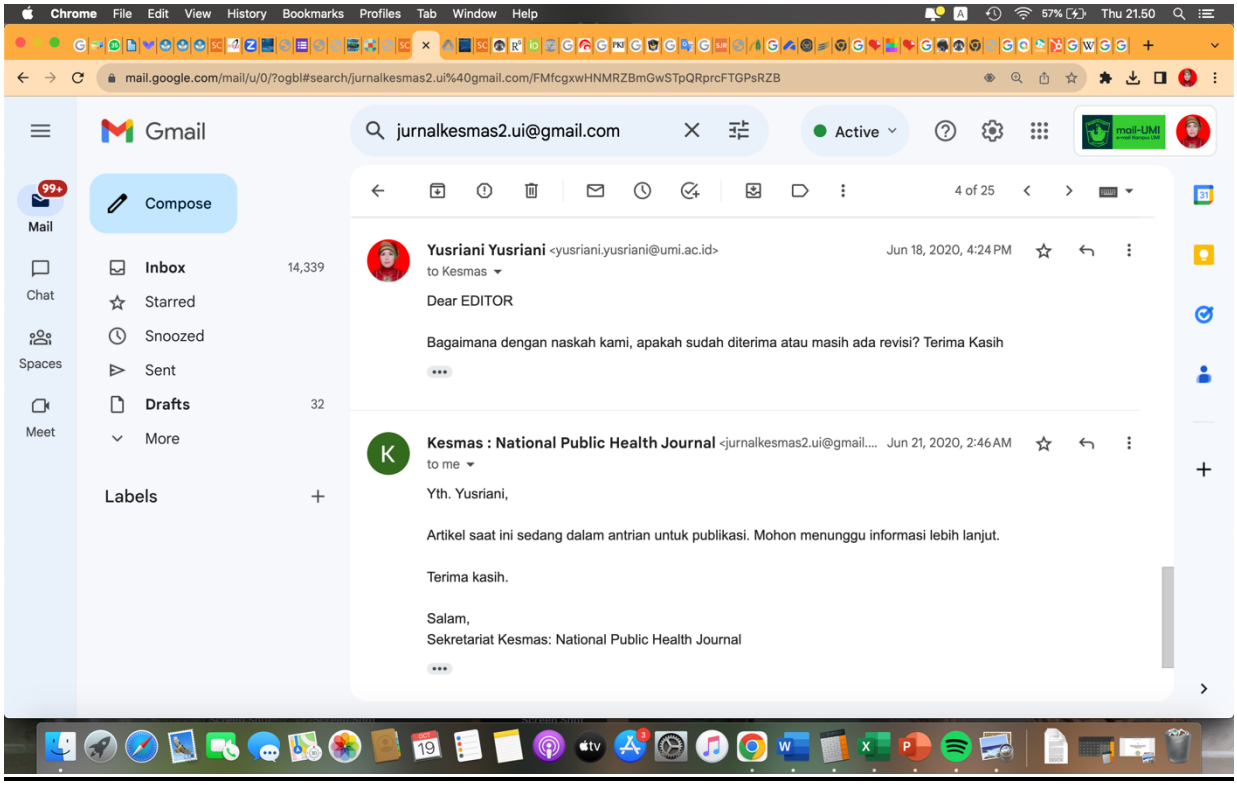
EDITING

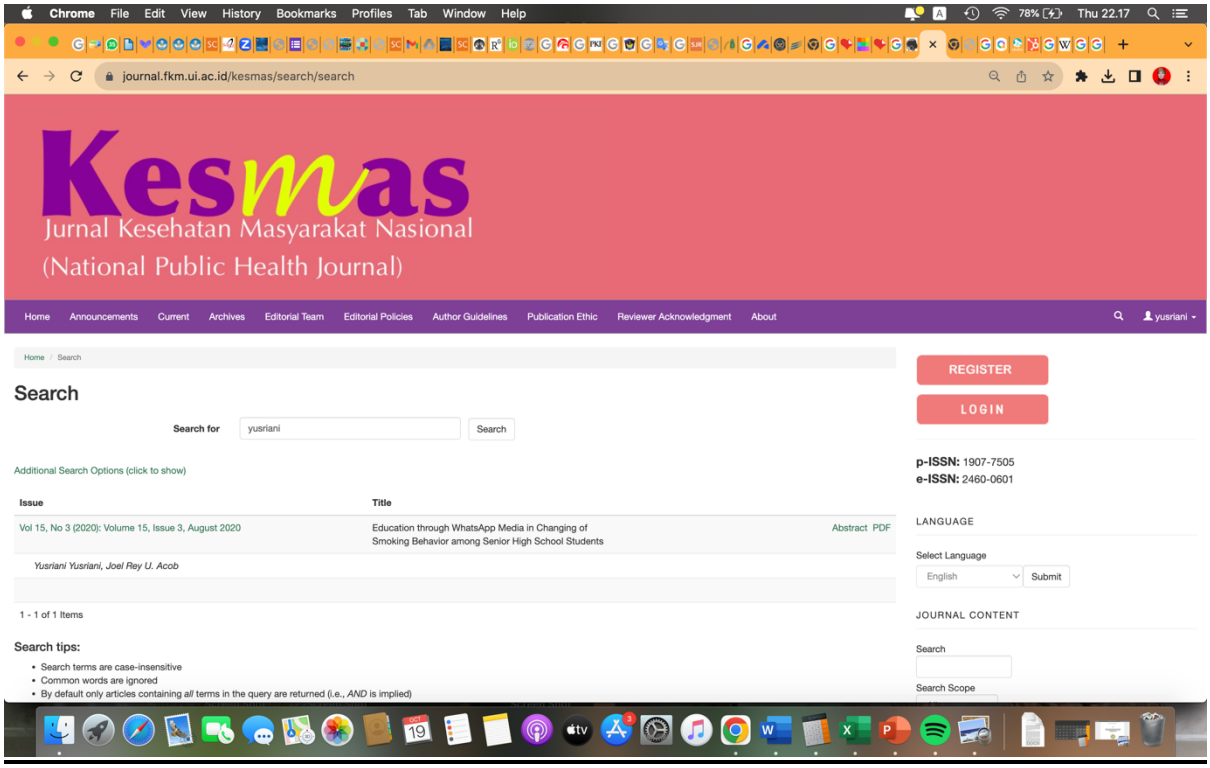


LAYOUT



PUBLISHED


Chrome File Edit View History Bookmarks Profiles Tab Window Help
mail.google.com/mail/u/0/?ogbl#search/jurnalkesmas2.ui%40gmail.com/FMfcgxwHNMRZBmGwSTpQRprcFTGPsRZB
Gmail
jurnalkesmas2.ui@gmail.com
Active
Compose
Inbox 14,339
Starred
Snoozed
Sent
Drafts 32
More
Labels
Mail
Chat
Spaces
Meet
4 of 25
Yusriani Yusriani <yusriani.yusriani@umi.ac.id>
Jun 18, 2020, 4:24 PM
to Kesmas
Dear EDITOR
Bagaimana dengan naskah kami, apakah sudah diterima atau masih ada revisi? Terima Kasih
Kesmas : National Public Health Journal <jurnalkesmas2.ui@gmail....
Jun 21, 2020, 2:46 AM
to me
Yth. Yusriani,
Artikel saat ini sedang dalam antrian untuk publikasi. Mohon menunggu informasi lebih lanjut.
Terima kasih.
Salam,
Sekretariat Kesmas: National Public Health Journal


Chrome File Edit View History Bookmarks Profiles Tab Window Help
journal.fkm.ui.ac.id/kesmas/search/search
Kesmas
Jurnal Kesehatan Masyarakat Nasional
(National Public Health Journal)
Home Announcements Current Archives Editorial Team Editorial Policies Author Guidelines Publication Ethic Reviewer Acknowledgment About
yusriani
Search
Search for yusriani Search
Additional Search Options (click to show)
Issue
Title
Vol 15, No 3 (2020): Volume 15, Issue 3, August 2020
Education through WhatsApp Media in Changing of Smoking Behavior among Senior High School Students
Abstract PDF
Yusriani Yusriani, Joel Rey U. Acob
1 - 1 of 1 Items
Search tips:
Search terms are case-insensitive
Common words are ignored
By default only articles containing all terms in the query are returned (i.e., AND is implied)
REGISTER
LOGIN
p-ISSN: 1907-7505
e-ISSN: 2460-0601
LANGUAGE
Select Language
English
Submit
JOURNAL CONTENT
Search
Search Scope