

Implementation of A QR-Coded Model for Stakeholders and Managers of Traditional People's Markets

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ABSTRACT

Health education for market residents to change behavior to create a healthy market can be done using pocketbooks, videos, and posters as the model chosen to create a healthy people's market. Socialization to stakeholders in each market is essential in making this happen. This research aims to determine the delivery mechanism, media either through barcode scans, so that stakeholders can easily convey the source of healthy market messages to traders and buyers to change the habits of market residents which originates from pocketbooks, videos, and posters, to stakeholders, including market managers, to be passed on to traders and buyers or visitors. This research used a qualitative descriptive method focusing on media delivery via QR Barcodes (pocketbooks, videos, and posters). The population in this study are stakeholders related to market management and cleanliness. The sample in this study used a quota sampling technique of 22 people, data collection used focus group discussion (FGD), and qualitative data analysis. The message delivery mechanism by implementing QR Barcodes can make it easier for stakeholders to convey healthy market messages to market residents. Traders want to create a healthy market by participating in spreading information about healthy markets through QR Barcodes. Respondents' most preferred medium for disseminating information is via WhatsApp social media, although suggestion boxes are still one way to channel complaints regarding obstacles in accessing healthy market information.

Keywords: Implementation, QR Model, Stakeholders, Healthy Market.

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INTRODUCTION

People's Markets in Indonesia from 28 provinces analyzed by the Ministry of Health in 2017, especially the environmental health conditions of markets 448 People's Markets; it is known that of the total markets analyzed, only 10.94% met the requirements, the remaining 89.06% did not meet the requirements¹. This condition is very concerning because it can increase the risk of transmission and spread of disease, both directly and indirectly, as well as other health problems². The impact is that

people can shop at modern markets; the conditions are cleaner and feel more comfortable compared to traditional markets or people's markets, especially in cities, which are currently felt³. The Healthy Market Approach is an effort that is integrative and synergistic with various other efforts that can guarantee clean, safe, comfortable, and healthy market conditions so that all activities in the market can run by their objectives and designation⁴. Socialization to stakeholders in each market is an essential factor in realizing healthy public market management. Therefore, commitment

and active participation of stakeholders are needed to develop a healthy market⁵.

The facts show that the perception of research market residents in 2021 (buyers, traders, and market managers) was that the majority said that the cleanliness of the aisles, tidiness, and availability of rubbish disposal sites in the panorama market was adequate, d) Meanwhile, the same perception was conveyed with a poor assessment of this aspect, separation of clean and dry waste, e) the manager's role in the socialization of healthy markets and the slogan of healthy people's markets.

Health education for market residents to change behavior to create a healthy market can be done using pocketbooks, videos, and posters as the model chosen to form a healthy people's market⁶. The media that has been perfected according to the plan will be applied next year, to increase knowledge of the attitudes and actions of market residents to participate in keeping people's markets clean and healthy to create a healthy people's market model:



Figures 1 and 2 QR-Code of a healthy market

As mobile technology becomes more prominent in our daily lives, mobile tagging with QR Barcode (Quick Response) in the business sector is prevalent worldwide. However, the movement to use QR Barcodes in education is still in its infancy. Apart from our research in this area, this paper explores the possibilities beyond the simple use of code and offers some suggestions on how the technology can be used to its full potential⁷.

The method for delivering health messages offered by researchers to managers, traders, and buyers at people's markets uses QR Barcodes, especially to convey health messages. The integration of QR Barcodes has been carried out in several studies. As has been done on aspects of listening and speaking skills in Malaysia on the periodic aspects of elements at the secondary school level and as an alternative media for scanning learning resources at the kindergarten level. The use of

QR Barcodes in the context of delivering healthy market materials using pocketbooks, videos, and posters in combination with delivering them on Google Drive to market people in Indonesia, exceptionally healthy people's market materials has never been done. Based on these opportunities, researchers tried implementing QR Barcodes and Google Drive to provide healthy people's market materials.

This research aims to determine the delivery mechanism, media either through barcode scans or other means, so that it is easy to understand the source of the message to change the behavior of market residents, which originates from pocketbooks, videos, and posters, to stakeholders including market managers, to be passed on to traders and buyers or visitors.

METHOD

This research used a qualitative descriptive approach to data collection using the FGD method, which previously prepared general and specific questions/guidelines regarding efforts to change behavior using the QR Barcode method, processing and analyzing using the reduction method, display data, conclusion drawing Miles, and Huberman (2018), focuses on delivering healthy people's market media through (pocketbooks, videos and posters) as a healthy people's market model which is contained in labels displayed on healthy people's market banners, and can be shared via the WhatsApp application with stakeholders, intended as a media delivery mechanism between buyers and market visitors and mechanisms to buyers and market visitors.

The population in this research are stakeholders related to market management and cleanliness in public markets, such as the Health Service, Trade and Industry Service, Market Service, city planning and environmental services, health centers, health policy lecturers, and market managers. The research was carried out at Panorama. Bengkulu City. The sample in this study used a *quota sampling technique* of 22 people, this number represents all elements of stakeholders who play a role in creating a healthy people's market, data collection using FGD, and qualitative data analysis according to stakeholder opinions and quantitatively in the form of percentage answers.

RESULTS

The FGD was held at the Panorama Market office on the second floor in the middle of the market on October 4 at 13.00 WIB until it was finished. The FGD was attended by 22 participants: the Head of the Market, the market manager, two Poltekkes lecturers from the D3 Sanitation Study Program, and the Applied Bachelor of Health Promotion Study Program in Healthy People's Markets.

Market residents, in this case (traders, buyers, and visitors), can participate in creating a healthy market according to the respondents' answers. Nine people answered yes, four answered yes, and three answered yes, as explained below.

"This is possible because traders, after selling, throw away rubbish in a designated place (JA), they can participate in making the market healthy (SR), yes, because it is essential for market progress, such as primary cleanliness."

Next, the FGD participants were asked whether they agreed with using media, pocketbooks, videos, and posters to create a healthy people's market, Agree, strongly agree, and can be 68.75%, 18.75%, and 12.%, respectively, such as the answers of FGD participants as follows:

"Agree because it can create awareness of the meaning of healthy living in a market environment (JA). Agree with the mass media so that traders and visitors know (AW) Yes, very much agree; for the sake of the continuity of a healthy market itself, traders/buyers understand what a healthy market is (EV) Can be a supporter of creating a healthy market (HK)."

Regarding the question of choosing the most appropriate media to socialize a healthy market, half of the respondents chose posters (50%), almost half chose videos (43.75%), and a small portion chose pocketbooks (6.26).

"Posters because they are easier to follow and implement (JA) Posters, because they can be seen immediately when installed around the market environment (SR) Posters because they are easier for the

public to see and read directly, Posters because easy to understand (D) Posters because they will be seen more often (AT) Posters are easier to understand and comprehend (S)."

"videos are easy to understand and more interesting (LJ) videos because they are easy to understand directly with pictures and clear explanations (R) videos because they are more interesting and do not get bored watching them (W) Videos because they are more interesting than posters or pocketbooks and easier to understand (EV) Video because it is more interesting and easier to understand (Y), video because it can be easily imitated directly (HK)."

"Pocketbook, so it is easy to re-read and understand it better (AT)."

"It is delivered directly to traders when they go to the field (Y) so that it is easier to understand and can discuss (SR); all market managers must create a WA group of market traders to convey it (JA) so that it is more practical to find out information about the healthy market itself (AW)."

The advantage of direct delivery is that it can be received through the sense of sight and hearing and several types of reception senses at once. This group approach is in line with what states that the group approach provides many opportunities for interaction and obtaining feedback. However, this method only reaches the target group and only reaches other farmers who join the farmer group. Respondents were asked how to evaluate to ensure whether traders accessed healthy market information. Respondents answered as follows:

"...by creating a WA group of traders who have been exposed to the media so that they can be evaluated (JA), ...conveying it directly to traders when they go to the field (Y), ...seeing changes in behavior by maintaining cleanliness (S), ...seeing the implementation of traders and market visitors maintaining cleanliness around the trading environment (SR)."

Barcode installation location for easy access. Scans by visitors, stakeholders, and FGD participants with opinions are posted in...

"..... it is placed for visitors at market entrances (ER), in busy and strategic places visited by traders, on stall walls and market entrances, gates entering the market because it is easier for everyone to see when entering the market (JA) Placed in strategic locations, for example in the culinary market and morning market and which is most visited by buyers (EV), at the main entrance to the Pamorama market, at the morning market, at the market office itself (HK)"

How do we disseminate information to traders and visitors about bar codes containing healthy market pocketbooks, healthy market videos, and healthy market posters other than through the WA Group?

"... Communicate directly to traders and visitors when entering the market (W), Can provide verbal understanding of the location of the poster containing the healthy market barcode (HK), Make announcements in the market using loudspeakers (TOA) so that traders can hear them directly market (SR), Put up posters in strategic locations (AW)...."

Next, stakeholders were asked how we are getting visitors interested and willing to know the Healthy People's market by scanning the Healthy People's market barcode.

"...By socializing directly with traders or visitors (HK) Explaining how to use barcodes (LJ) By introducing examples of healthy markets from other cities or regions (W), (EV), (Y) Disseminating through print & electronic media (AT), Creating barcodes that are attractive and do not fade easily, are easy to access (D).."

How do you evaluate whether healthy market media has been read and understood or implemented?

"....By asking directly to traders and visitors (LJ) and by asking market visitors

(Y)(AT), It is clear that the environment is clean and neatly arranged (S)(W) (EV) (D)(SR), By looking at the increasingly neat and clean market conditions (R)...'

How do I discover the obstacles and suggestions for improving information delivery to traders, buyers, and visitors to the healthy people's market? Stakeholders have the following opinions.

"... through the WA group which has created a Poster (LJ), by creating a suggestion box at least 5 points at each market entrance (SR)(JA), by accepting input from the WA group or setting up a suggestion box (W) (AT) (D)(R) Conducting interviews with traders and visitors (AW) (D)...'

When asked which media, between pocketbooks, videos, and posters, can we improve together shortly? Most stakeholders think of posters, followed by videos. Like the following answer.

"... Poster (D)(HK)(Y)(S) (AW)(W)(LJ), Video (SR) (AT)Video and poster (R)(EV), Book (JA).. ."

Is there a mechanism or other way to change the behavior of market residents to create a healthy people's market? Apart from using Barcode scans as offered, stakeholder suggestions and input are varied.

".... By making rubbish dumps everywhere and making clean hand washing places (R)(W) (SR) If you can provide cleaning equipment such as rubbish bins, etc. (LJ) By applying the discipline of throwing rubbish in its place and living net (EV) reward and punishment system if traders and merchants violate cleanliness (AW) (D) Controlling traders who sell on the roadside (D D)(S), by going directly to the field to provide socialization and even providing rubbish bins so that there can be a healthy market (HK)(Y)"

DISCUSSION

Traders are willing to participate in creating a healthy traditional market. Responses regarding the question indicate whether traders

are willing to participate in creating a traditional market. Social participation is participation in which the community gets involved in social activities for the common good. Community participation in social forms in Ngadiprono Hamlet has gone better since the existence of the Papringan Market. Community participation in the social form carried out by the people of Ngadiprono Hamlet is cooperation. This was done because public awareness about cleanliness and a healthy environment exists⁸. Community participation is essential in achieving success and sustainability of development programs. Participation means the conscious participation of a person or group in an activity⁹.

Furthermore, stakeholders agreed to use educational media, such as pocketbooks, videos, and posters, to create and change the behavior of traders to create healthy traditional markets. Most market managers, stakeholders from the Market Service, Health Department, representatives of health polytechnic lecturers, and sword coordinators use media to create a healthy people's market, using pocketbooks, videos, and posters. Like previous research on PHBS health education using video media, most respondents were in a good category. This is because there is an influence before and after health education using video media on the level of knowledge regarding PHBS¹⁰. Posters are effectively used as a health communication medium because their physical appearance is attractive, made using color, and the content of the message is helpful for the reader¹¹.

When market traders were asked which media was most accessible to understand, including pocketbooks, videos, and posters, the reason was that half of the respondents chose posters mostly (50%), almost half chose videos (43.75%), and a small portion chose pocketbooks (6.26). Based on the research results, it is known that visitors can see the posters at the installation site because the place is quite spacious. Apart from the size of the place where the poster is installed, the poster place is a unique attraction when visitors are around the place of installation. Visitors are interested in reading hypertension posters because the poster's position is appropriate to the eye's view, so it is easy to read¹².

Respondents chose posters and video media more because posters and booklets have advantages, namely: (1) Clients can adapt from independent learning; (2) Users can view the

contents at leisure; (3) Information can be shared with family and friends, (4) Easy to create, reproduce and correct and easy to adapt; (5) Reduces the need for note-taking; (6) Can be made simply at relatively low cost; (7) Durable; (8) Wider capacity; (9) Can be directed at specific segments. The advantages of video media are that it makes it easier for teachers to present information, has appeal, and is interactive. Video media can also be used repeatedly¹⁰.

Panorama market managers (eight people) and five representatives of traders from 35 blocks deliver video and poster booklets to all traders. What mechanism should they use? Hearing and several kinds of reception senses at once. This group approach is in line with what states that the group approach provides many opportunities for interaction and obtaining feedback. However, this method only reaches the target group and does not reach other farmers who do not join the farmer group¹³.

Market traders want education through social media, compared to print media. WhatsApp social media is used to disseminate health information to people who use this media; for example, cadres convey information about vaccine implementation. Information was sent via WhatsApp as a reminder to RT, RW, and Subdistrict Head. This party can convey it directly to residents in each hamlet¹⁴. Health education using posters and videos can change people's behavior in a healthier direction when facing COVID-19¹⁵.

Market traders agree to use QR barcode media placed in strategic locations. According to previous research, this media banner is installed in front of the entrance to the health center, in front of the village office, in front of the posyandu, and in other affordable public places¹⁵.

Stakeholders suggest that swords should always be reminded to read electronic education continuously so that healthy behavior changes occur. There has been much input from stakeholders to attract visitor interest. In line with QR Barcode-based digital literacy in Bonto Jai Village, Bissappu District, Bantaeng Regency, it has made it easier for village communities to access information related to education and various other information needed by the community.

Then, to evaluate whether traders access the QR barcode or not, stakeholders suggest continuous evaluation. Most

stakeholders think that after socializing healthy markets by scanning QR barcodes and observing changes in the behavior of market residents, especially by implementing clean and healthy markets, which are reflected in the environment, the better the management of traditional markets that are competitive, healthy, clean, safely and orderly can be implemented¹⁶.

Suppose there are obstacles in accessing healthy market information. In that case, most stakeholders believe that a suggestion box is still needed, and some ask directly to traders and visitors and other opinions via the WA group. The continuation of healthy market education can be followed up with other efforts to create a healthy market. In connection with this, a healthy market approach is needed to create conditions for people's markets that are comfortable and free from health problems and disease transmission. The healthy market approach is a business that is integrated and synergizes with various other businesses that can create clean, safe, comfortable, and healthy market conditions so that the market can run by its goals and functions⁴.

CONCLUSION

The conclusion is the message delivery mechanism to change trader behavior can be done by implementing QR Barcodes. Traders wish to create a healthy market by participating in disseminating information about a healthy market through QR Barcodes. The media that respondents most want to disseminate information is WhatsApp. One way to channel complaints regarding obstacles to accessing healthy market information is to use WhatsApp, although the suggestion box can still be used.

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CONFLICT OF INTEREST

At this moment, the author declares that there are no personal or institutional conflicts of interest that might be deemed to inappropriately influence the representation or interpretation of the reported research results.

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