Perception and Behaviour towards Hospital Website among Indonesian

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Abstract: Hospital website plays a pivotal role in engaging patients. Research on the behavior of patients in using hospital website is still less published in Indonesia. This study aimed to describe Indonesian perception and behaviour towards hospital website—this quantitative research using the cross-sectional method. The data has been collected during February – March 2019 that recruited 160 respondents using a consecutive sampling method. An online questionnaire has been used for data collection. Data of the research were analyzed by using SPSS Version 21. Most of the respondents were 27 years old (12.5%) with a mean of age 31 years old. 71.9% of respondents visited the hospital' website to see the available facility and the schedule, while 70.6% of respondents see the doctor' plan. 74.4% of respondents stated that information on the hospital website was available but not complete while another problem was website information was not up to date. In the role of the site in assisting the respondent in choosing a hospital, 79.3% of respondents stated that the hospital' website assisted them in selecting a hospital. Hospital manager should arrange adequate resources to provide and maintain hospital' website to ensure up to date, complete and accurate information on the site so that could assist patients in using the hospital service.

1 INTRODUCTION

As the result of developing of the private sector as well as the expansion of government to build a new hospital, the hospital numbers in Indonesia is rising during the last decade (WHO Regional Office for South-East Asia, 2017). Quality improvement was needed to be performed by a hospital to sustain in the very extreme competitive environment (Speziale, 2015). Moreover, Information Technology (IT) plays a significant role in improving healthcare quality (Baker, 2001; Ortiz and Clancy, 2003).

In this decade, the consumer uses the internet for grasping health information is growing (Grandinetti, 2000). That condition is exceptionally durable for teens and young adults, as these demographics show the highest rate of internet usage both in general and specifically for health information (Atkinson, Saperstein and Pleis, 2009). Therefore, the Hospital managers should consider internet use in their hospital operation, specifically for marketing purpose.

Research in the United States stated that hospital website has a benefit to explore customer feedback and opinion, build effective communication channels for customers, create creative promotion and communication for customers' need and personalize service encounters (Lin *et al.*, 2001). Using a website is one of the ways to use the internet as a medium to promote the hospital so that the hospital can expand the market leverage (Radu *et al.*, 2017). Patient engagement that made during the initial contact may be developed by visiting the social media and web presence of the hospital (Sanchez, 2000)—failing to make a first positive impression through the hospital' website and social media results in consumer to explore other alternatives (Huerta *et al.*, 2014). Therefore, a hospital website plays a pivotal role in hospital marketing.

Although the importance of hospital website and social media is acknowledged, several kinds of research showed that hospital' social media and website performance were still underperformance. An evaluation of 157 children's hospital website in the United States revealed that there are no website dimensions (accessibility, content, marketing, technology, usability) that met a perfect score (Huerta *et al.*, 2014). Meanwhile, one research performed in Indonesia stated that content and ease

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of use degree of the hospital website were significantly associated with the satisfaction of the patient (Novan, Nugroho and Hidayah, 2015). Another research in Kediri, Indonesia revealed that usability of the hospital' website for its functioning as online registration is affected positively by learnability, memorability, errors and user's satisfaction (Khoirina, Fithrotu; Herdiyanti, Anisah Herdiyanti; Sustanto, 2017).

Despite some researches have been performed in Indonesia to evaluate the use of the hospital' website using information system usability approach, yet, research of hospital' website as marketing media remains less. This research is aimed to analyze the behaviour and expectation of Indonesian women in using hospital' website. By performing this research, it is expected to gain the insight regarding the information that needed and should be existed in the hospital' website which in turn could provide additional evidence for hospital manager and experts in building hospital website.

2 METHODS

This quantitative research using the cross-sectional method. The population of this research is women aged 20-64 years old. The age range was chosen based on the assumption that these group ages is still using and actively using the hospital website as the source in seeking hospital service information. This research was conducted using an online questionnaire. The number of respondents who participated in this study was 160 respondents. The samples were chosen using a quota sampling technique.

Before data collection, respondents have been explained the research aim and the procedure to fill the questionnaire. The women who agreed to participate in the study signed consent form. Anonymity and confidentiality of respondents had been ensured. The survey consisted of three parts. First part is to know the respondent characteristics (age, level of education, working status, marriage status, number of children, economic status). The second part was designed to explore the behaviour of women in using hospital' website, such as time visiting the site, what information that been looked for by the respondent. The third part is the perception of women in using the hospital website. The third part of the questionnaire explores whether the website condition has met their expectations or not. Also, the common problems that they encountered when accessing the hospital website

were studied in this section. Data of the research were analyzed by using SPSS Version 21 (Armonk, NY: IBM Corp). Descriptive statistics were used to describe the demographic status, perception and behaviour in using hospital' website.

3 RESULTS

The number of respondents is 160 people. The majority of respondents came from the age group 26-45 years 112 (70.0%) with female sex 110 (68.8%). More than a third of respondents had an education level of S1 / S2 / S3 143 (89.4%). The majority of respondents work at a private company (50%) and earn more than 10 million per month. One hundred five respondents were married, and the majority of respondents had 1-2 children 72 (45%) (Table 1).

The behaviour of visiting the hospital website before visiting the hospital is presented in Table 1. The majority of respondents claimed to do this sometimes (43.8%), and 28 respondents said they often visited the hospital website before they visited the hospital. In term of the age group, it is known that the group that most often visited the hospital website before they visited the hospital came from the age group 26-45 years (11.9%). In terms of income, groups that often and always visit hospital websites are dominated by groups with a profit of more than 10 million rupiahs (8.1% and 9.4%).

Table 1: Visiting website behaviour based on respondent's socio-demographic characteristics

	Always	Frequently	Occasionally	Never		
Total	21 (13.1)	28 (17.5)	70 (43.8)	41 (25.6)		
Age, years						
≤ 25	0 (0.0)	1 (0.6)	4 (2.5)	3 (1.9)		
26 - 45	16 (10.0)	19 (11.9)	53 (33.1)	24 (15.0)		
\geq 46	5 (3.1)	8 (5.0)	13 (8.1)	14 (8.8)		
Sex						
Female	14 (8.8)	22 (13.8)	47 (29.4)	27 (16.9)		
Male	7 (4.4)	6 (3.8)	23 (14.4)	14 (8.8)		
Education						
High school	0 (0.0)	4 (2.5)	5 (3.1)	8 (5.0)		
University	21 (13.1)	24 (15.0)	65 (40.6)	33 (20.6)		
Occupation						
Private	15 (9.4)	11 (6.9)	35 (21.9)	19 (11.9)		
employee						
Civil servant	2 (1.3)	4 (2.5)	14 (8.8)	4 (2.5)		
Entrepreneur	0 (0.0)	5 (3.1)	4 (2.5)	7 (4.4)		
Student	0 (0.0)	3 (1.9)	7 (4.4)	8 (5.0)		
Housewife	1 (0.6)	3 (1.9)	9 (5.6)	3 (1.9)		
Not working	3 (1.9)	2 (1.3)	1 (0.6)	0 (0.0)		
Income (Rupiah)						
< 5 million	3 (1.9)	3 (1.9)	24 (15.0)	12 (7.5)		
5-10 million	5 (3.1)	10 (6.3)	23 (14.4)	8 (5.0)		
> 10 million	13 (8.1)	15 (9.4)	23 (14.4)	21 (13.1)		
Marital status						
Single	8 (5.0)	9 (5.6)	19 (11.9)	18 (11.3)		

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Married	13 (8.1)	19 (11.9)	50 (31.3)	23 (14.4)		
Divorce	0 (0.0)	0 (0.0)	1 (1.4)	0 (0.0)		
Number of children						
0 child	10 (6.3)	13 (8.1)	24 (15.0)	18 (11.3)		
1-2 children	10 (6.3)	11 (6.9)	36 (22.5)	9.4)		
\geq 3 children	1 (0.6)	4 (2.5)	10 (6.3)	8 (5.0)		

Table 2 shows the respondents' perceptions of the hospital website. The majority of respondents answered that the existence of the hospital website helped respondents in choosing hospitals (n = 127, 79.4%). In terms of providing information about hospital services, more than a third of respondents agreed that the hospital website helped in providing information about services in the hospital. Only 5 (3.1%) respondents stated that the ownership of a website by a hospital was of little importance. Seventy-five respondents (46.9%) respondents will choose hospitals that have useful websites than those who do not have a website.

Table 2: Respondent perceptions of hospital website usage

	n	%
Hospital website helps in choosing a hospital		
Very helpful	65	40,6
Helpful	62	38,8
Unhelpful	33	20,6
Hospital website can provide info about hospital services		
Very helpful	56	35,0
Helpful	84	52,5
Unhelpful	20	12,5
Hospital website can provide health information		
Very helpful	33	20,6
Helpful	70	43,8
Unhelpful	57	35,6
Hospital website can help patients make reservations		
Very helpful	43	26,9
Helpful	69	43,1
Unhelpful	48	30,0
Hospital Website Ownership		
Very important	110	68,8
Important	45	28,1
Unimportant	5	3,1
Choosing a hospital with a proper website		
Yes	75	46,9
Maybe	78	48,8
No	7	4,4

More than 70% of respondents visit the website to see the services available (115 respondents) and see the doctor's schedule (113 respondents). Only 25 (15.6%) respondents answered that their purpose was to visit the hospital's website to view information about health. The top three content that is considered essential to be displayed on the hospital's website according to respondents is the content of the doctor's schedule (140 respondents), service schedule (129 respondents), available services (125 respondents) and price of services (125 respondents) (Figures 1 and 2). Figure 3 shows the problems encountered by respondents when visiting the hospital website. The results of the study also showed that the majority of informants answered that they found the hospital website had constraints, the information was incomplete, the information was not up to date, info was not available. In addition to the lack of available information problems, another problem is a less attractive design, slow and confusing websites.

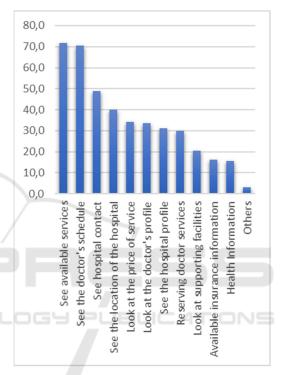


Figure 1: Respondents' purpose for vising hospital website

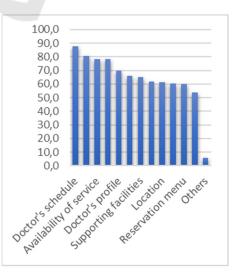


Figure 2: Information needed in the hospital website

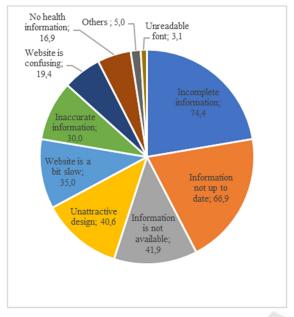


Figure 3: Troubles encountered when vising hospital website

4 DISCUSSIONS

The results showed that the majority of respondents had visited the hospital website before they visited the hospital. The results of this study are confirmed by other studies conducted in China which state that the ease of use of the site and the usefulness of the website are strictly related to the selection of hospitals and recommend hospitals that have websites with these criteria to others (Ford *et al.*, 2013; Wang, 2017). The ease of use of the website is something that needs to be considered considering this is one of the factors that support the use of hospital websites (Cudmore, Bobrowski and Kiguradze, 2011).

In this study also found that the hospital website is also considered to help respondents in choosing a hospital because it can provide various information such as services available to health information. The results of the study are in line with a survey conducted in Indonesia that 51.06% of the Indonesian people use the internet to find out health information and 14.05% of the public use the internet to consult with health experts (Asosiasi Penyelenggara Jasa Internet Indonesia, 2018).

Various obstacles were still found by respondents when they visited the hospital website, such as information that was not up to date or not available as well as a confusing website. Other studies conducted at hospitals in the city of Jember also found that there were still various obstacles such as incomplete information on poly/doctor service schedules, service rates (Farlinda *et al.*, 2015).

This research does not focus on one particular city so that it cannot describe the specific characteristics in every city in Indonesia in describing the use of hospital websites. Research related to the use of hospital websites is needed in several cities, so there are variations in the use of hospital websites in various cities in Indonesia. Besides, further research is required to be related to the existence of hospital websites with patient satisfaction.

5 CONCLUSIONS

This study revealed that the existence of a good website was one of the considerations for respondents in selecting a hospital. The results of the survey showed various information needed on the hospital website according to the respondent, such as doctor's schedule, service schedule, available services and other relevant information. Besides, the hospital website also needs to be developed so that the information contained in was not only complete but also up to date, interesting and easy to use.

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