

## Modification of Calgary Cambridge for Indonesian medical students: Communication guidelines

Galih Cahya Wijayanti<sup>1</sup>, Rizma Adlia Syakurah<sup>2</sup>, Mariatul Fadilah<sup>3</sup>

<sup>1</sup>Medical Profession Students, Medical Faculty, Sriwijaya University, Indonesia

<sup>2</sup>Public Health Faculty, Sriwijaya University, Indonesia

<sup>3</sup>Indonesian Medical Council, Indonesia

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### ABSTRACT

Effective communication skill applied by doctors in the doctor-patient consultation process becomes one of important factors that can improve the consultation outcomes such as patient satisfaction, adherence to treatment and recovery process. However, effective doctor-patient communication is rarely applied in practice. Limited consultation time, patient overload, doctor burnout, and poor communication skills are among the factors that cause ineffective doctor-patient communication process. This study aimed to develop a new effective communication guideline for doctor-patient communication in Indonesia by modifying the Calgary Cambridge medical interview guide. This study uses qualitative approach within four stages: expert panel, student panel and focus group discussion, expert review, and trials. Informants were chosen purposively. Three points of high category, 24 points of middle category and 44 points of low category are resulted from expert panel stage which consists of specialist representatives from 12 clinical divisions in Dr. Moehammad Hoesin central public hospital (RSMH), Palembang, South Sumatera, Indonesia. The high and middle category were discussed by two groups of internships doctors in RSMH in student panel and focus group discussion (FGD) session. The results were validated by a doctor-patient communication expert (expert reviewer) and then tested by the internship doctors through role play at the trial stage. The final result yields eight main points and eleven effective tips of the Calgary Cambridge Guide checklist modification with five to six minutes effective consultation time. This modified guideline is appropriately applicable for doctor-patient communication in daily consultation in Indonesian practical, social and cultural context.

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### Corresponding Author:

Rizma Adlia Syakurah

Public Health Faculty

Sriwijaya University

Jl. Raya Palembang-Prabumulih KM. 32 Indralaya, Ogan Ilir, Sumatera Selatan, 30662, Indonesia

Email: rizma.syakurah@gmail.com

## 1. INTRODUCTION

Communication in the medical field which is one of the basic clinical skills included in the competency area that has been validated by the Indonesian Medical Council is important to be developed in order to build the clinical competence of a doctor along with the clinical knowledge, problem solving skills, and physical examination [1]-[3]. Doctor-patient communication skills (the ability to hear, empathize, and

use open sentences) have been shown to affect medication adherence, increase patient satisfaction, and the healing process [4], [5].

In terms of clinical expertise, Indonesian doctors are as skilful as the foreign doctors, but not in the doctor-patient communication aspect where the foreign doctors are better than the Indonesian doctors. Some patients testify that the medical treatments in Singapore are very satisfying because the consultation process with the doctor can take an hour. In Indonesia, on the other hand, the doctor-patient communication tends to be a one-way process and it is quite rare for a patient to get adequate time for consultation, even for fifteen minutes of time, so the patient's need to communicate their health problems and get a convincing response from the doctor is not fulfilled. Basic communication, such as asking the patient's name, introducing themselves, and giving informed consent is quite seldom to be implemented by doctors [6], [7]. Time limitation, large number of patients, doctor fatigue and poor communication habits are the factors that affect the process of doctor-patient communication [8], [9].

To improve and practice effective communication skills for both doctors and medical students, the Calgary Cambridge Guide can be used. The Calgary Cambridge Guide describes and defines the consultation process into stages in a systematic and comprehensive manner that contains 71 basic clinical skill points. This guide has been used extensively in various countries as a resource of the main study, assessment, and research communication skills of doctor-patient [2], [10]. The Calgary Cambridge Guide has a large number of points, and it is deemed less effective to be applied in the existing conditions, so it is necessary to make a simpler and more applicable guide adapted to the existing practical conditions, social and culture.

## 2. RESEARCH METHOD

This research used qualitative approach by describing data from a phenomenon systematically and presented in explanatory sentences [11]. There were four stages in this study, namely expert panels, student panels and focus group discussion (FGD), experts review, and trials [12]. Informants were selected by purposive sampling. The expert panel informants were representatives of specialist doctors from 12 divisions at Dr. Mohammad Hoesin central public hospital (RSMH), Palembang, Indonesia and asked to choose maximum 20 points out of 71 Calgary Cambridge points that are considered to be the most effective and useful for communication to be applied. Student panel, FGD, and trial informants were internship doctors at RSMH.

The total of recommendation points from the expert panel was compared to doctor-patient checklist from the previous research and Universitas Padjajaran (UNPAD) checklist. Then, the data obtained from the expert panel stage was categorized based on a scoring system. Score of 0-5 is presented as low category, 6-10 as middle category, and 11-14 as high category. High and middle points were discussed in the student panel and FGD stage by two groups of internship doctors in RSMH while the low category points were not included in the next stage.

## 3. RESULTS AND DISCUSSION

The expert panel stage was carried out by informants who were representatives of specialist doctors from 12 divisions of RSMH. Researchers asked informants to choose as many as 10-20 points from 71 points in the checklist of Calgary Cambridge which are believed to be the most important and effective points to be implemented. After the data was collected, a scoring was carried out and resulted in three points for the high category, 24 points for the middle category, and 44 points for the low category. Student panel and FGD discussed the 24 middle category points. Seventeen points were chosen and agreed by the two FGD groups, five points were chosen by one group, and two points were not chosen at all by both two groups. The Points agreed by both of groups based on FGD presented in Table 1. The points agreed by one group based on FGD presented in Table 2. The points of disagreement by both groups based on FGD presented in Table 3.

Table 1. Points agreed by both of groups based on FGD

No.	Content
3	Demonstrate respect and interest, prioritize physical comfort. FGD 1: <i>"It's necessary, so they feel comfortable and being respected by the doctor"</i> FGD 2: <i>"It is important during the meeting with the patient, especially at the beginning to build patient's trust."</i>
54	Prepare safety nets, explain possible unexpected outcomes, what to do if the plan does not work, when and how to seek help. FGD 1: <i>"Agree, it is necessary to explain."</i> FGD 2: <i>"Patients must be provided with CIE (Communication, Information and Education)"</i>
62	Inform the name of the action or treatment offered, steps involved, how it works, the benefits and advantages, and the possible side effects. FGD 1: <i>"Must be explained."</i> FGD 2:

No.	Content
	2F: <i>"(What is) usually explained is the name of the drug, how it works and side effects."</i> 2G: <i>"It can be applied, usually at polyclinic where there is rejection and approval checklist."</i>
69	Provide clear information on procedures. FGD 2: <i>"(It) can be applied, a must. Just combine it with points to provide information on action or treatment."</i> Encourage the patient to tell the story of the problem(s) from when it first started to the present in their own words. FGD 2B: <i>"Yes ... you can."</i>
8	2D: <i>"But this point is similar to the patient's listening point without interruption."</i> 2G: <i>"It's different from the point of listening without interruption, but the two points can be combined."</i> MD: <i>"So what about this point? Can you use it?"</i> All Information: <i>"Yes, you can, but if the story starts to deviate politely interrupt the patient."</i> Involve the patient: During physical examination, explains process, asks permission FGD 1: <i>"Explain the process as well as the informed consent before physical examination."</i>
32	FGD 2: 2C: <i>"Must seek approval."</i> 2D: <i>"Explain the process in an outline, for example, the stomach will be examined later on, ma'am, some pressure will be put on it."</i> Involve patient: - To suggest and make options rather than being directive. - To contribute their ideas and suggestions. Student Panel: <i>"If the patient takes so long (decision), is confused and hesitates for an urgent and emergency decision, a doctor's direction is more needed than advice and options."</i> FGD 1
48	1D: <i>"Just give the patient directions, because the patient is usually confused."</i> 1F: <i>"But the patient has right to choose, so first explain what the options are."</i> 1A: <i>"Agree, according to the points, the doctor gives advice and options, the doctor explains which option is the most appropriate but the choice remains with the patient if the directions seem to force the patient to follow the doctor's advice."</i> FGD 2 2E: <i>"Can be applied to cases that require consent."</i> 2A: <i>"For example in the selection of birth control pills, anaesthetics, surgery."</i> 2B: <i>"For important decisions, emergencies, or when the patient is unsure or confused about choices, directions tend to be more required and needed than advice."</i> Use concise, easily understood questions and comments, avoid using medical language. FGD 1:
15	1D: <i>"When asking, you should be brief. If you explain too much it will be hard for the patient to understand."</i> 1B: <i>"But if you explain too much it will take time, at least when it comes to risks then it will be explained."</i> 1H: <i>"So it's good when asking questions in layman's language and just briefly, but when explaining it can use medical language as long as it is explained again using the patient's language."</i> FGD 2: <i>"Avoid medical language, the patient will be confused."</i> Use concise, easily understood language and sentences and comments, avoid using medical language.
40	FGD 1 and FGD 2: <i>"This point has the same meaning as point 15, so you can use only one of the points or the two points are combined into one point."</i>
56	Do a final check to ensure that patient agrees and is comfortable with the plan, and ask whether there are any corrections, questions or other items to discuss. FGD 1: <i>"It must be done, ask again if there is anything that is still unclear or what the patient will convey and schedule the next consultation."</i> FGD 2: <i>"Yes, it should be. If necessary, review the plans to be carried out and other important things so that the patient doesn't forget."</i>
9	Use open and closed questioning techniques, it is more appropriate to start with the open questions then move to the closed ones. FGD 1: <i>"It needs open questions so that the interview is not rigid, if there are too many closed questions as if the patient is not given the opportunity to tell and express his opinion, the patient cannot be open and doctors will only receive limited information to diagnose."</i> FGD 2: <i>"Yes, it should be."</i> Use verbal and non-verbal cues (body language, speech, facial expression, affect) appropriately. FGD 1
12	1G: <i>"It can be done while the patient is talking and afterward, the doctor watches the patient speak and says" err is that so ma'am "after the patient finishes telling the story, so the doctor looks enthusiastic and pays attention to the patient."</i> 1H: <i>"When the patient talks, the doctor can show a response such as nodding his head."</i> FGD 2: <i>"It could be applied."</i> Demonstrate appropriate non-verbal behaviour. - eye contact, facial expression - posture, position & movement - vocal cues e.g. rate, volume, tone
23	Student Panel: <i>"Agree, but if you're tired, sometimes (you) forget to do these points. Doctors are not robots who have to keep smiling all the time."</i> FGD 1 and FGD 2: <i>"Agreed, but combined with similar points."</i> 1A: <i>"Is it similar to point 12?"</i> 1D: <i>"Why not only use one (of the points) or combine it?"</i> Use empathy to communicate understanding and appreciation of the patient's condition.
27	FGD 1: <i>"Agree, combine with other similar points."</i> 1D: <i>"Empathy through understanding and facial expressions."</i> FGD 2:

No.	Content
	2A: "You can show empathy but not pity." Involve patients: Involve patient by explaining answers or rational reasons to the patient's questions or as part of a physical examination. Student Panel: "During the physical examination, it is preferable to be uninterrupted, explain the results after completing the physical examination only."
31	FGD1: "Agree, it is better for the doctor to provide an explanation before or after the physical examination." FGD 2: "Before the physical examination, the doctor explains the physical examination process that will be carried out and asks the patient's consent (join point 32)" Discuss options e.g., whether or not some action, investigation, medication or surgery, non-drug treatments will be carried out (physiotherapy, walking aides, fluids, counselling, preventive measures).
61	FGD 1: "It's the same as negotiating a plan. It must be done so that the patient knows more clearly about the actions and management that will be given." FGD 2: "Agree, it needs to be discussed and explained even though there is no action."
	Provide opportunities and encourage for patient to contribute: to ask questions, seek clarification or express doubts.
44	FGD 1 and 2: "Agree" "Only done at the end of the explanation or when the patient looks confused, by asking" Are you clear yet? Is there anything you want to ask or not? "

Table 2. Points agreed by one group based on FGD

No.	Content
	Actively determine and appropriately explore: <ul style="list-style-type: none"> <li>• patient's ideas</li> <li>• patient's concerns (i.e. worries) regarding each problem</li> <li>• patient's expectations</li> <li>• how each problem affects the patient's life</li> </ul> FGD 1: "Agree"
17	1E: "It's necessary, as long as it's concise and doesn't waste time." FGD 2: "Disagree." 2E: "This means you have to capture the patient's concern, huh?" 2H: "For example, I understand your concern." All informants: "I can't do this, it takes too long. It's also rarely done, but if this point can be sufficiently described in simple way like 'I understand how you feel', then it is okay to do it" An example of this point statement according to FGD2: "I understand what you mean....." "I know you are worried ....."
71	Discuss possible undesirable results of treatment plans and follow-up actions, explain it whenever possible. FGD 1: "Just combined it with an explanation of side effects." When reading, writing notes or using the computer, do it in a way that does not interfere with the conversation or rapport. Student Panel "Reading, taking notes or using a computer is better done after the conversation, if it is done during the conversation, it looks disrespectful to the patient, unprofessional, and makes the patient feel uncomfortable, and difficult to do because of divided attention / focus." "Good communication should be reciprocal and involve both parties, doctor and patient. You need to focus on your patient first without doing other activities such as taking notes or using a computer."
24	FGD 1: "Disagree." 1F: "At RSMH, I never take anamnesis while using a computer, but I often take notes (while doing the anamnesis)" 1A: "(I) listen first until it's finished then take notes, I'm afraid not to concentrate and ask the patient the same thing" 1C: "Yes, it seems that you don't pay attention to the patient if you take notes (while doing the anamnesis)" FGD 2: "It can be as long as it's not in an emergency condition, (I'm) afraid to forget if (I) don't take notes, but ask the patient's permission first." Accept legitimacy of patient's views and feelings; is not judgmental. Student Panel "Not all views and opinions of patients are correct. It needs to be corrected so that perceptions are the same." "Patients with certain characteristics (stubborn) must be educated with a little judgment / affirmation so as not to repeat mistakes."
26	FGD 1: "Disagree, we need to improve the wording." 1A: "Don't judge, it means not to blame, huh?" 1F: "But usually at RSMH if a patient is wayward, he has to be judged." 1A: "Maybe he or she needs to be educated, without blaming and judgment." All informants: "Not all views and opinions of patients can be accepted, so listen to what his opinion is, if the patient's opinion is wrongly justified and then explain carefully." FGD 2 2C: "You can't just judge, just give advice and education." 2A: "But Indonesian patients must be judged in order to comply, just add the judgment for patients who do not comply." 2H: "The patient's wrong views, for example certain traditions or habits, should not be accepted, listen to it first and then correct it." Describe the benefits, values and objectives associated with procedure plan treatment.
70	Student Panel "This point is important to apply because sometimes the patients forget the things which have been told if they are not explained more deeply and repeatedly."

Table 3. Points of disagreement by both groups based on FGD

No.	Content
	Structures interview in logical sequence Student Panel: <i>"Getting the interview conclusion should not ask sequential history, but what is remembered first."</i>
	FGD 1 All informants: <i>"No need"</i> 1C: <i>"For history, it doesn't have to be sequential, just what the patient remembers at the first place."</i> 1D: <i>"Sometimes amidst the consultation, patient suddenly comes up with a complaint that has not been stated before."</i>
21	1H: <i>"It doesn't matter if it's not in order, the important thing is to ask all of them and at the end we summarize ourselves."</i> 1C: <i>"But if the structure of the interview from the beginning to the closing must be sequential."</i>
	FGD 2 2C: <i>"Too formal if you have to ask the history in order."</i> 2F: <i>"Just according to the situation and conditions, which one is remembered first, but for the sequence from introducing names, asking complaints, physical examination to the end of the review, the good ones are in order so that it is more focused."</i>
	Listen attentively to the patient's opening statement, without interrupting or directing patient's response Student Panel <i>"Time does not allow the doctor to listen to all the patient's complaints without interruption, sometimes patient says something out of context, therefore, permission to interrupt is needed so that the contents of the interview do not deviate."</i>
	FGD 1 1A: <i>"Don't use it, it will take too long if you don't interrupt."</i>
5	1B: <i>"If there are a lot of patients, it's not effective to listen to the complaints without interruption. Even in the polyclinic, we haven't asked yet but the patient has already told a long story."</i> 1C: <i>"It is necessary to keep the timing, so it needs to interrupt and direct (the patient)."</i>
	FGD 2 2C: <i>"No, you can't, the patient will pour his heart out too long."</i> 2F: <i>"If you have deviated anywhere, it must be interrupted."</i> 2A: <i>"If the anamnesis takes so long, it will be scolded by the resident doctors."</i>

Besides discussing the middle category points, the two groups also discussed high category points because two points in the high category were not carried out and not approved by informants in previous studies [4]. The high category points as shown in Table 4.

Table 4. High category points

No.	Content
1	Greet patient and ask patient's name.
2	Introduce yourself and clarify the role, and nature of the interview, ask approval.
4	Identify the patient's problem, the main reason for visiting, and the expectations that you want to get from the consultation with open-ended questions.

From the results of FGD by the two groups, it was found that the effective time estimated for implementing doctor-patient communication is about 5-15 minutes with 15-20 effective points. According to the informants, the allocated time could be conditioned if there were no obstacles such as differences in language and misunderstanding.

The results gained from the high and middle point's discussion, the estimated time and number of effective points, were then consulted with doctor-patient communication expert to validate and approve the modification of the Calgary Cambridge checklist. The expert approved 27 points proposed consisting of three points for the high category and 24 points for the middle category. Several points that have the same meaning were combined or used only one of them and finally they were separated into two parts, eight main points and eleven tips. These points were arranged in order of the interview structure from the beginning to the end of the doctor-patient communication process. The main points and tips of Calgary Cambridge Guide modification a shown in Tables 5 and 6.

Table 5. Calgary Cambridge Guide modification (main points)

No.	Content
1	Greets patient, obtains patient's name, introduces self, role and nature interview
2	Identifies the patient's problem or the issues that the patient wishes to address with appropriate opening question
3	Encourages patient to tell story of the problem(s) from when first started to the present in own words
4	Involves the patient during physical examination, explain process, asks permission
5	Discusses option e.g., no action, investigation, medication or surgery, non-drug treatments (physiotherapy, walking aides, fluids, counseling), preventive measures
6	Provides information on action or treatment offered: name steps involved, how it works, benefits and advantages, possible side effects
7	Safety nets, explaining possible unexpected outcomes. What to do if plan is not working, when and how to seek help
8	Final check that patient agrees and is comfortable with plan and asks if any corrections, question or other issues

Table 6. Calgary Cambridge Guide modification (tips)

No.	Content
1	Demonstrates respect, interest, and attends to patient's physical comfort
2	Listens attentively to the patient's opening statement, without interrupting or directing patient's response
3	Uses open and close questioning techniques, appropriately moves from open to closed
4	Actively determines and appropriately explores: patient's ideas, patient's concerns, patient's expectations; structures interview in logical sequence
5	Picks up verbal and non- verbal cues (body language, speech, facial expression, affect)
6	Structures interview in logical sequence
7	If reads, writes notes or uses computer does in a manner that does not interfere with dialogue or rapport
8	Uses empathy to communicate understanding and appreciation of the patient's feelings or predicament
9	Explains rationale for questions or parts of physical examination
10	Provides opportunities and encourages patient to contribute: to ask questions, seek clarification or express doubts
11	Involves patient: offers suggestions and choices rather than directives, encourages patient to contribute their own ideas, suggestions

After being confirmed by the expert that the modification of the checklist of Calgary Cambridge Guide was valid, the modified checklist was then being trialled through a role play by three internships doctors and it was found that the consultation time without physical examination is five to six minutes.

### 3.1. Starting the interview (Initiating the session)

The patient's first impression is important for the effectiveness of the doctor-patient communication process. Some doctor's behaviours that can give the first impression as expected by the patient are asking and mentioning the patient's name, introducing himself, telling what will be done during the consultation and showing appropriate expressions, eye contact, and gestures [13]. From the FGD results, it was found that greeting and asking the patient's name can avoid mistakes of patient identification and status build rapport and comfort. It is important for doctors to introduce themselves to patients because they can build initial relationships and good communication with patients, besides that the Joint Commission International (JCI) assessment at RSMH requires patients to know the name of the doctor who treats them.

This result contrasts with the previous research that assessed the doctor-patient communication in 2014 conducted to the residents of internal medicine polyclinic at RSMH Palembang using a checklist concise Calgary Cambridge Guide. The observations conducted to the internal medicine residents indicated that the patient's name was not asked because of stated patient's status. Self-introducing and explaining the purpose of anamnesis were not applied because it was not important and the atmosphere was too stiff [8].

### 3.2. Gathering information

In doctor patient communication, there are two important sessions, namely the information gathering session which contains the history taking process and the delivery of information. Through a complete history, about 78.6% can support the diagnosis [14]. For typical and frequently encountered complaints, doctors can give specific and narrow questions to make them more focused and save time [15]. According to the FGD group, a complete history involving patients to tell stories about the complaint itself is important, but if the patient talks in length and is not directed, the doctor may interrupt and direct the focus of the conversation politely and subtly.

The FGD informant argued that the use of open-ended questions first then closed questions must be done and the users need to pay attention, because if they use too often closed question, it can give impression to the patient that it is difficult for him to tell and put forward his opinion, so the information obtained is limited and patients are less open. Listening skills, empathy, and the use of open-ended questions are some examples of communication skills that can affect patient satisfaction and improve health care outcomes [16].

### 3.3. Physical examination

In the consultation process, physical examination contributes 8.2% in determining the diagnosis of the patient's disease. According to the FGD informant, before the physical examination, it is important for the doctor to outline the process and ask for informed consent. Providing consent is carried out to a conscious patient by explaining the patient's current condition, the physical examination to be carried out, the benefits and risks and given in understandable language. If the information provided by the doctor is not fully understood by the patient, the informed consent basically cannot be confirmed [17]-[19].

### 3.4. Explanation and planning

The explanation and planning stage aim to provide accurate and comprehensive information. It is important to explain and discuss options and procedures (whether there is action or not), provide information and explain the course of action, treatment, goals, side effects, and benefits of therapy offered. If the patient

does not agree to the therapy or action offered, the patient may refuse by filling in the refusal sheet provided at the health facility (polyclinic at RSMH).

A complete doctor's explanation and good communication regarding the diagnosis, treatment options, and prognosis can influence the patient in determining the treatment options given and improve patient adherence [4], [20]. It is also important to provide safety net against unexpected things, and explain the possibility of unexpected results, what should be done if the plan does not go smoothly according to the FGD discussion. This point is the same as communication, information, education (CIE) and important to give to patients. The importance of providing information about the unexpected things has led to the creation of policies and programs in America regarding transparency of communication with patients. The patient expects earlier information about the possibility of something unexpected. It was hoped that the ability to deliver communication, provide information and education in the form of preventive, promotive, curative and rehabilitative forms is needed since the primary health care level [21]-[23].

### 3.5. Closing the interview

At the closing stage of the interview, final checking to ensure that the patient understands, agrees and is comfortable with the plan and asks if there are corrections, questions or other things that are not clear and reminds the schedule of consultation (if needed) is important to do so that the patient does not forget important things that have been described. At the end of the interview, it is important for the doctor to build the understanding of the patient about his condition, what is happening and what plans are going to be done.

### 3.6. Building the relationship

Effective doctor-patient communication is characterized by the interaction that provides reciprocal information between doctors and patients, both verbal and nonverbal and can build good relationships with patients [3]. The FGD discussion stated that showing respect, attention, empathy, and prioritizing patient comfort are some examples of important points to make to build patient's confidence in the treating doctor, besides that the patient will feel comfortable and appreciated by the doctor.

Empathy to understand communication and appreciate the patient's feelings or condition according to FGD information is important as long as the doctor does not get carried away to cry (sympathy), empathy is shown by appropriate facial expressions and words that show that the doctor understands the patient's condition. The empathy shown by the doctor to the patient will foster a patient's sense of trust in his doctor which will influence satisfaction and patient adherence to treatment [24].

Two-way communication and focus on the patient without doing other activities such as using a computer or taking notes is important, but if necessary, it is better to ask the patient's permission first. Give complete attention to the patient, do not concern himself with other things and if deemed necessary to record information about the patient, tell the patient first [25].

During the consultation process, it is important for doctors to give patients the opportunity to ask questions, clarify, express doubts or his by saying at the beginning of the meeting to the patient to ask and reveal his opinion during or at the end of consultation process. The doctor can also ask the patients to ensure their understanding toward what is being explained when the patient shows non-verbal sign of confusion. A study in Korea concludes that patients will have a negative view of doctors who have a dominant communication style towards patients and do not provide opportunities for patients to express their views [24]. The doctor-patient communication paternalistic pattern is commonly applied in Southeast Asia due to time constraints, the number of patients, and the low level of education [26].

### 3.7. Structuring the interview

The ability to structure interviews aims to ensure that the consultation process can take place with a definite purpose. According to the two FGD groups, the logical sequence of the interview structure is needed if it is intended as a sequence from opening the interview to the closing session; but it does not need to be sequential in terms of asking various histories related to the patient's complaints as long as the doctor can summarize and conclude the patient's condition at the end of the consultation. A sequential and structured interview that does not jump from topic to topic can make patient understand the purpose of the questions asked by the doctor and make the doctor easier to diagnose and summarize the entire consultation process.

Based on the results of this study, in interview structure the summary making at the end of every question session and confirming to the patient before moving on to the next session which is commonly known as content reflection were not included. According to expert panel informants, these points indicate that doctors do not pay enough attention nor listen to patients so there is no need to do so. Meanwhile, according to the student panel, these points were only carried out and summarized at the end of the consultation, because if at the end of each session confirmation carried out, the patient tends to get bored and the patient will doubt the doctor's ability. Effective communication can be characterized by reciprocity, a good listener, the use of open questions, reflection, and summarizing the patient's condition [27].

### 3.8. Consultation time

The results of the FGD discussion stated that the effective consultation time at RSMH ranged from 5-15 minutes. After being tested with the role play method using Calgary Cambridge Guideline modifications, it was found that the consultation time was between 5-6 minutes without physical examination. In line with this, a research conducted at Makassar Hospital, Indonesia regarding patient satisfaction in implementing effective patient doctor communication found that most respondents spent 6-10 minutes for consultation and treatment because the number of patients was relatively large with only one doctor serving in each clinic. In addition, doctors who serve often come late, thereby reducing the availability of time to serve patients [28]. Based on research in Japan regarding consultation time and its influence variables, the overall average consultation time was six minutes 12 seconds, 11% of the samples obtained an average time of three minutes or less [29].

Most general practitioners in London think that the ideal consultation time is around 10 minutes, but 10 minutes is not enough for chronic cases, complex conditions, geriatric patients and health promotion targets. Dr. Burnett said that the quality of the consultation is more important than the quantity of time spent [30].

## 4. CONCLUSION

The modification of Calgary Cambridge Guide checklist developed in this research consists of eight main points and eleven effective tips. This modification guideline is suitable to be used in daily doctor-patient consultation and communication in Indonesia concerning its practical condition and socio-cultural context.

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