BARRIERS OF CUPPING PRACTITIONERS’ ADHERENCE TO MALAYSIAN CUPPING PRACTICE GUIDELINE: A QUALITATIVE STUDY

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Abstract

Cupping therapy is defined as a therapeutic treatment using evacuated cups being placed to intact or scarified skin to withdraw blood and interstitial fluid filled with causative pathological substances. Clinical practice guideline is crucial to assist in decision making during patient care and promote standardized care which helps to increase quality and patient outcome. Adherence to cupping practice guideline was considered low at 5.3% in prior study (Mahat & Rahman, 2020). Hence, this study aimed to explore barriers of cupping practitioners’ adherence to Malaysian cupping practice guideline. This qualitative study involved three cupping practitioners who agreed to semi-structured interviews. Several barriers of practice guideline use were identified using thematic analysis. Among these are increased cost, lack of practice resources, lack of time, inadequate knowledge on the guideline, lack of agreement, and lack of feeling expectancy. Furthermore, being surrender or tawakkal is notified as a newly emerged barrier from the analysis. Specific measures addressing those should be disseminated and implemented, such as to streamline educational training in enhancing guideline familiarity. Besides, it is essential to have reminder systems such as notification pop-out, email, face-to-face session and management chain to assist in guideline use.

Keywords: barriers, cupping practitioners, adherence, cupping practice guideline, qualitative

1.0 INTRODUCTION

Traditional & Complementary Medicine (T&CM) is a form of health-related practice that helps to prevent or manage ailments and to preserve the mental and physical well-being of an individual for many centuries. These include cupping practice which has evolved to reflect different philosophical and cultural origins. Nowadays, the T&CM including cupping practice has been increased swiftly throughout the world and its acceptance has increased significantly.

According to the data obtained from the National Health and Morbidity Survey (NHMS), Malaysia, as on 2015, a total of 29% of local population had ever used any T&CM practices with consultation, meanwhile 22% of the population used T&CM for the last one year with consultation
(Institute for Public Health, 2015). Cupping was among the top five preferred methods of maintaining wellness, with the proportion of 6.5%. From those who ever used cupping, they were at greater risk of adverse events such as anemia, skin infection or even bloodborne-disease transmission such as hepatitis B, C, and Human Immunodeficiency Viruses (HIV) as it engaged with invasive procedure, especially in wet cupping. These can be due to malpractice, and are avoidable if the practitioners adhere to the cupping practice guideline (Kim et al., 2014). Hence, practice guideline has become a bedrock to enhance appropriateness and safety of practice, and to improve quality of care which eventually led to better patient outcome (Woolf et al., 1999). Practice guideline is founded on evidence-based medicine, and it emphasized on the proved benefits which have the probability to reduce morbidity and mortality and improve quality of life.

It is necessary to get practice guidelines easily available and accessible widely to escalate its implementation. There are two ways of practice guidelines can be disseminated, active and passive dissemination (MOH, 2015). Passive dissemination of printed documents and online downloaded, are believed to be less effective in reaching the maximum coverage. As in Malaysia, individual attainment of cupping practice guideline can be retrieved via soft copy from Ministry of Health (MOH) and other related professional bodies’ websites (MOH, 2015). It must be combined with other active guideline dissemination such as training module and educational workshops by higher authority, such as T&CM division, Ministry of Health (MOH), Malaysia. Currently, T&CM Act 2016 (Act 775) has been gazette to regulate TC&M services in Malaysia, including promoting maximum participation in guidelines usage, together with other regulations (Medicine, 2016).

To accomplish a full coverage of practice guidelines’ dissemination and adherence, an evaluation of barriers needs to be considered. Practice guidelines were intended to encourage the uptake of the best practice among practitioners, however there’s still a gap in implementing the guidelines into practice (MOH, 2015). The barriers can be due to several factors such as internal factor, which relates to the guidelines itself and external factors which consist of clinical environment and other circumstances. To date, T&CM MOH has relentlessly promoting the guidelines throughout regular meetings with cupping practitioners from all over Malaysia, in collaboration with Gabungan Pertubuhan Pengamal Perubatan Melayu Malaysia (GAPERA) to create awareness on its existence.
As according to Cabana’s Clinical Practice Guidelines Framework, barriers to guideline adherence can be expanded from the main sequence of behavior change, which are knowledge and attitude, and the effects towards behavior (Cabana et al., 1999). Practice guidelines can positively affect patient’s behavior when they primarily influenced practitioner’s knowledge and attitude. Behavior can be tailored without knowledge or attitudes being affected, however, getting changed of knowledge and attitudes over the suggestive behavior would be sustainable when compared to changing of behavior only. Knowledge-related barrier can be due to lack of knowledge with regards to the guidelines. Meanwhile, attitude-related barriers comprise of lack of agreement with the guideline, lack of outcome expectancy in which practitioners, believe adhering to guideline do not improve patient outcome, lack of process expectancy where practitioners believe guideline do not improve healthcare process, lack of feeling expectancy in which practitioners think that guideline aggravates predicament feelings, lack of self-efficacy or confidence and lack of motivation to follow guidelines. Other than knowledge and attitude related barriers, failure to guidelines adherence might be due to external barriers, which encompass of guideline-related, patient-related and setting-related (Cabana et al., 1999). There are numerous studies that in consistent and evidently coherent with the knowledge, attitude and external-barriers (Maric et al., 2019; Shah et al., 2015). Therefore, the aim of this qualitative study is to explore the barriers of cupping practitioners’ adherence to Malaysian cupping practice guideline.

<table>
<thead>
<tr>
<th>Revised version of Cabana’s Clinical Practice Guidelines Framework for Improvement proposed by Espeland and Baeheim</th>
<th>Healthcare professionals typically diverge from a guideline because they:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of barriers</strong></td>
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<tr>
<td><strong>Knowledge-related barriers</strong></td>
<td></td>
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<tr>
<td>Lack of knowledge of the guidelines</td>
<td>Did not know (and do not already use) guidelines</td>
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<tr>
<td><strong>Attitude/feeling-related barriers</strong></td>
<td></td>
</tr>
<tr>
<td>Lack of agreement with the guideline</td>
<td>Disagree with the guideline decision criteria</td>
</tr>
<tr>
<td>Lack of outcome expectancy</td>
<td>Believe following guidelines worsen or do not improve patient outcome</td>
</tr>
<tr>
<td>Lack of process expectancy</td>
<td>Believe guidelines worsen or do not improve healthcare process</td>
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<tr>
<td>Lack of feeling expectancy</td>
<td>Think it provokes difficult feelings</td>
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<td>---------------------------</td>
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<tr>
<td>Lack of self-efficacy</td>
<td>Do not think they have the competence to follow the guidelines</td>
</tr>
<tr>
<td>Lack of motivation/inertia of previous practice</td>
<td>Are not motivated to follow guidelines or change habits</td>
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</tbody>
</table>

**External barriers**

**Guideline-related**

Consider the guideline unclear or impractical to use

**Patient-related**

Perceive pressure from patients to diverge or because of patient characteristics

**Setting-related**

Think their practice setting makes them diverge due to:

- lack of time
- insufficient time to inform or negotiate with patients
- lack of other practice resources increased costs
- insufficient materials, staff or reimbursement
- increased costs if the guideline is followed
- increased malpractice liability
- risk of legal actions
- pressure in the healthcare system
- pressure from other healthcare providers/organizations
- improper access to healthcare services
- too easy/difficult to actual or alternative services.

### 2.0 MATERIALS AND METHODS

A qualitative research method was conducted, which employed phenomenological study design. Phenomenology can be characterized as needing to know the essence of a lived phenomenon and experiences. This human experience in this study was related to the exploring the reasons for not adhering to cupping practice guidelines. Data were collected from individuals who were having the same phenomenon and lived experiences and thus being encapsulated in the description.

Purposive sampling was conducted involving three cupping practitioners as participants. The recruitment was developed following the results of prior quantitative study conducted in measuring adherence to cupping practice guidelines. At earlier stage, a cross sectional study was performed to determine adherence to practice guideline among cupping practitioners. Based on the analysis, those who obtained lower score in the questionnaire were classified as non-adherence. Therefore, the researcher contacted all those non-adherences by phone to make appointments in
order to interview them for data collection. The interview sessions were conducted few times until data exploration is completed.

This qualitative study applied single data collection method, namely in-depth interview. In-depth interview involved direct one-to-one individual engagement with the participant during data collection (Showkat & Parveen, 2017).

In this study employed semi-structured interview approach in probing the interviews to obtain dense insights and knowledge related to the phenomenon. Semi-structured interview involved a set of open-ended questions that help to lead the conversation in a standardized way but still allowing the emergence of new issues in between the talking (Keeffe, Buytaert, Mijic, Brozovi, & Sinha, 2016). Informed consent was obtained from practitioners after the procedure was fully explained to them upon the arrival at the premise. Respondent’s consent form comprises of the research purposes, types of information required, confidentiality and anonymity statement. Ethical approval was obtained from Medical Ethics Committee of Universiti Sains Islam Malaysia (USIM), the Ethic code USIM/JKEP/2017-21.

The process of interview involved the researcher as the interviewer together with a note taker as filed notes, took place at the participant’s premise or home-based, conducted at their convenient time. The interview was audio-recorded with 40 to 90 minutes duration each session and it involved more than once meet up for each participant. All interviews were conducted in Malay language. It is then being transcribed and edited by the interviewer for accuracy. The transcription then has been translated into English to be easily discussed in the findings. Back-to-back translation from Malay to English has been conducted by the researcher and verified by the expert in both languages to secure valid results. Moreover, in terms of any inaccuracy such as spelling errors in the text were edited properly. The confidentiality of the respondents was maintained by using pseudo names to replace the real name.

Validation or trustworthiness of data is crucial to maintain credibility of qualitative data. To achieve that, triangulation method and peer debriefing were implemented. Triangulation happened when the researcher asked the same questions to the respondents at different time to validate the insights. Meanwhile, peer debriefing involved a peer to review data such as transcriptions, the emerging themes and final report to prevent any unaccounted or embellishing
points. It was conducted with one of the colleagues who also took part in the interviewing, transcribing, and determining the emergence of themes.

Qualitative Data Analysis (QDA) Miner Lite has been used as an instrument to structure and organize the data and helped to manage and explain data descriptively. Thematic analysis has been applied to identify the importance patterns and themes in addressing the issues. Transcripts were read and highlighted all text that appeared to be the potential barriers to guidelines use. Codes were developed based on all the highlighted paragraphs with predetermined codes. The predetermined codes of barriers were matched with the framework by Cabana. To ensure the accuracy of the transcription, the researcher assessed the transcripts while comparing them to audio files.

3.0 RESULTS

This study involved three participants with various backgrounds. The average length of interview was 63 min, ranged 41 – 84 min. There were 61 pages of transcribed text. Table 1 shows the characteristics of the three participants.

Table 1: Characteristics of the participants.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Participant A</th>
<th>Participant B</th>
<th>Participant C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Age</td>
<td>37 years old</td>
<td>40 years old</td>
<td>34 years old</td>
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<tr>
<td></td>
<td>Diploma Bekam Klinikal USM</td>
<td>Diploma (Bekam)</td>
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<td></td>
<td>Sijil Bekam Oxidant Drainage Therapy (ODT) Jakarta Indonesia</td>
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<tr>
<td></td>
<td>Sijil Kemahiran</td>
<td>Malaysia Urutan</td>
<td>Tradisional Melayu</td>
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</tbody>
</table>
According to the revised version of Cabana’s Clinical Practice Guidelines Framework for Improvement (Espeland & Baerheim, 2003), there are three main categories of barriers; namely knowledge-related, attitude-related and external barriers.

**Knowledge-related barriers**

According to the stages of behavioral change, practitioners primarily need to be familiarized with the guideline to develop an adequate understanding of it. Therefore, the most possible knowledge barriers are lacking in awareness and familiarity. By curbing this barrier may produce a lasting successful adherence among the practitioners. In relation to the inadequate knowledge on the guideline, the participant did not aware and not familiar with the existence of the guideline itself even though the person has been practiced cupping therapy every now and then. This is evidently by:

“.........C: I don’t know about practice guideline from MOH. Just do it (cupping)........”

One of the participants had informal cupping training, obtained from family members, instead of getting education and training from certified institutions. This finding is worrisome as the users may exposing themselves with undesirable outcomes, mainly infection.

“.........C: I learnt doing bekam (cupping) from my grandfather. I observed him doing the procedure and leant from that. I was 3 years old at that time. I learnt the cupping points from him........”
One of the respondents also being oblivious on the knowledge of Hepatitis B and C, in which it is a must know important diseases related to blood-borne infection. Unawareness may hinder them from heeding to precautionary measures.


Moreover, the most prominent concern is the infection control element which involved the disposal of blood products and standard precautions that may introduce the possibilities of getting infections if not being executed. One of the participants did not know on how to properly dispose all the blood residuals. The participant just thrown away the blood products in domestic dumping bin, which might spread the possibilities of contagions harming human and the ecosystem.

“.....C: I just throw away the blood in the bin (at home).......”

“....A: either I flush the blood in the toilet, throw in domestic bin or buried in the ground....”

The next component they were lacking at was knowledge on the contraindication of cupping therapy. The ascended issues were cupping therapy can be done in babies and on varicose vein. These were evidently explained in the guidelines as contraindications to perform cupping.

“..........C: At this site (varicose veins), we can do cupping. Yes, sometimes we can do cupping at the place (varicose vein) but need to do with little pressure because I’m afraid it will cause nonstop bleeding..........”

Nevertheless, the rest of the participants were aware on the practice guidelines and agreed to practice according to the recommendations.
Attitude/ feeling-related Barriers

Attitude can be defined as behavior based on conscious or unconscious views developed through living experiences (Altmann, 2017). After the practitioners being acquainted with the guideline, they should be able to develop a positive attitude towards it.

Lack of agreement with the guideline

The first barrier in relation to attitude was disagreement with cupping guideline. These included not using alcohol swab before skin prickling in wet cupping therapy and insisted to enable cupping on babies provided with the right technique.

“…..C: no. if I use alcohol swab before pricking, there will be not much blood come out (during cupping)…..”

“…..B: Based on what I’ve learnt, 2 years old kid also can be cupped. I once cupped 7 months old baby…”

“…….B: We can do cupping on babies, but the methods need to be correct. With precise methods, the effects would be good…they (MOH) should include one of the practitioners in the meeting earlier when decided on the practice guidelines…..”

In addition, one of the participants felt the guideline is complicated to be heeded. For instance, disposal of blood products can be easily done by burying or throwing them into the garbage because in their judgement, company who took over this disposal might just do the same, which is incineration. This may eventually lead to the air and ground pollution as well.

“…..A: I’ve attended one seminar. Yes, they mentioned about safety procedures and all, but it is (procedure) complicated! In what sense? When blood is discarded in the soil, it will diffuse and harm the environment, and thus affect the health of human and animals. When we think about it, it is indeed complicated. If that so, then where did the Radicare (disposable company) throw all the blood products? They will burn (incinerate) it and go to the soil eventually. So, it is the same…..”
The participants also did not agree to ask for consent before procedure being done because as in their insight, when someone is coming to do cupping, indirectly the patient has given their consent to proceed.

*B*: “…..When people come for cupping treatment, indirectly they have given the consent. They came voluntarily. So, no need to fill in the consent form….”

**Lack of feeling expectancy**

It is where they believe that by abiding to the guidelines might provoke difficult feelings. Some of the practitioners felt disturbed when they need to put on the personal protective equipment (PPE) such as gloves, mask, and apron in which it delayed their treatment process. This is as shown below:

“……..*B*: First time of implementing the guideline, I felt disturbed. Because I was familiar with what I’ve practice all this while………”

They also mentioned that by asking the patient’s HIV status in history taking might offended them as they believed that this information is too sensitive to be shared. This step is included in the practice guideline.

……..*A*: By asking whether the patient has HIV or not, is not appropriate for me. We do not want to make patient to feel uncomfortable and fail to build rapport with the patient, since that was the first time we met. So, asking about HIV history is not necessary.........”

**Surrender to God-Allah/ Tawakkal**

There was a new sub theme emerged from the analysis, which was surrender to Allah/ God (*redha*). Majority of the participants stated that sometimes they did not adhere to the guideline
especially in donning the PPE, as they believed God will never put them in trouble due to their good deeds. All of them are Muslim and thus believing in God is synonym with their pillar of religion.

“……..C: It’s ok.. we just tawakal (surrender) to Allah (God)……..”

……..A: Logically, we intended to help people, therefore Allah (God) will never be cruel and merciless on us by giving us the diseases. So, we need to put trust in Allah and have good thought on others. We pray “ya Allah (O God), I want to help him, please keep me save from his diseases”. There was one friend of mine who never had HIV until he passed away albeit he didn’t wear any PPE…….”

**External Barriers**

Other than knowledge and attitude related barriers, external factors may limit the ability to perform the recommended behavior according to the guideline. This external or environmental barriers include inappropriate setting-related such as lack of time, lack of practice resources, and increased cost that may hinder the application of guideline. For example, a well-trained cupping practitioner is confident in conveying the treatment but is affected by environmental barrier such as insufficient cost in managing the needs of the patients. The persistence in this barrier may eventually affects the outcome of the guideline application.

*Setting-related*

Under external barrier, there were no guideline or patient-related barriers mentioned by the respondents. All external barriers to guideline use were connected to setting related. First and foremost, the entire participants revealed that high cost as one of the hindrances. They mentioned if they were to follow the guidelines, that might incur a lot of cost and therefore hampered them from abiding to it. One of the participants mentioned that alcohol swab is expensive and thus it
was not included in skin preparation before puncturing in wet cupping. This might introduce bacteria and pathogens into the patient’s bloodstream and put higher risk on patient’s safety.

“......C: I didn’t use alcohol [to clean up the skin before puncturing] because it is expensive....”

Besides, they mentioned about disposing clinical cupping waste through non-clinical hospital services like Radicare was expensive and impractical. This is because daily blood products amount was too little and not worthwhile to the cost of requesting the company to come and expose daily. To encounter this, one participant had enlightened that disposing blood products in domestic garbage is no wrong as it has the same condition with disposing menstrual blood among ladies.

“......B: So far, we don’t have sterilizer for cups and yellow bin. Its pricey......”

“......B: I put the blood in a plastic and throw it in regular waste bin. It is costly to call for a company to manage the blood [Radicare].......”

“......A: its costly to call disposal company [Radicare]. Sometimes, only few patients coming for cupping daily. Even with small amount of blood will produce bad smell. Hence just throw it in waste bin. I am not able to follow the disposal procedure yet because I need to pay a lot for that......”

Moreover, all participants also mentioned about lack of time to practice the guidelines.

“......A: sometimes I don’t have time to follow the guideline......”

“......A: sometimes we are not capable to follow guideline, one of the reasons is time. For example, yes, we did weigh the patient and took the history but sometimes the patient was in intense pain, so we didn’t do all the procedures that I mentioned but go straight to do cupping....”

“......C: If patient is in a rush, I don’t wear gloves but straight go to the kitchen (sink basin) to wash hand [before cupping]......”
Next factor which covered under setting-related barrier is increase malpractice liability concerns. As one of the respondents stated that:

“……A: for the time being, there is the law (Act 775) but the enforcement is not yet being implemented. Nobody [from MOH] come and do the inspection. So, we are a bit relief. When thinking about the act making me jittery……”

As no enforcement was done by the authorities to date, hindered these practitioners from abiding fully to the guideline. Some of them reflected their worries if penalty is to be done to monitor their practices.

4.0 DISCUSSION

Knowledge-related barriers

Knowledge can be defined as facts, information, and skills attained through education or experience, that is the theoretical or practical familiarity of an issue. Knowledge is one of the factors of behavioral change, where to have a good adherence, this is a prerequisite (Fischer et al., 2016). In terms of knowledge, the most impediment reasons in current study were insufficient of awareness and familiarity of the guideline.

Several studies have been found to be in consistent with the findings related to knowledge inadequacy as barrier of adherence among practitioners. A prior study conducted in Dublin, Ireland through focus group discussion mentioned about insufficient dissemination of the guidelines among their stroke caregivers as one of the threats of perceived barrier towards guideline, and thus introduced unsatisfactory awareness (Donnellan et al., 2013). Besides, prior systematic review conducted in relation to assessing barriers to optimal healthcare which consist of quantitative and qualitative studies, discovered that 65 out of 256 articles concluded barriers to be deficiency in knowledge, awareness or skill (Cochrane et al., 2007). Lack of knowledge is mentioned as not fully knowing the information related to practice guidelines. On top of that, earlier study conducted in Netherlands also in agreeable with current study, where lack of knowledge was discovered to be one of the highly cited barriers (46%) (Lugtenberg et al., 2009). Despite knowing existence of guideline, some of them were unmindful with the contents of it.
As mentioned by the participants in this study, one of them was unaware on the existence of Malaysian cupping practice guideline. This might be due to the participant did not undergo any formal cupping education or training. During the training, students are introduced regarding clinical practice guideline, collect medical history or case presentation to enhance their practice training (Kim et al., 2017). This is also supported by previous study conducted among Malaysian cupping practitioners, where 54% of them never attended cupping training (Mahat & Rahman, 2020). Hence, there is higher probability of not knowing and being unfamiliar with the guideline. To enhance knowledge among cupping practitioners, it is prudent to conduct continuous training in order to update on any practice issues or enactment law related to the field. An interactive education and active participation among practitioners revealed to be an effective way to gain knowledge (Lugtenberg et al., 2009). Additionally, the feedback and evaluation can be done in the future by our government to assess the successful of guideline adherence. Even though the guideline can be easily available online, notification is imperative to spread the existence. As evidently mentioned in prior study, reminders and educational outreach are some of promising interventions to gain the awareness (Fischer et al., 2016) (Michie & Johnston, n.d.).

**Attitude-related barriers**

*Lack of agreement with the guidelines*

In terms of attitude, disagreement with the guideline is the most prominent theme discussed in the interview. There are abundance of prior studies discussing on this type of barrier. Preceding study on systematic review related to gaps between knowledge and practice stated that 41 out of 256 studies identified the contents of the guideline itself as the hindrance to guideline adherence (Cochrane et al., 2007). They were disagreed on some parts of the contents, making them reluctant to uptake the contents of guideline. Furthermore, this study is in parallel with prior study conducted in Netherland revealed that the most perceived barrier was scarce agreement in practice guidelines (68%) (Lugtenberg et al., 2009). Likewise, in current study, this theme was emerged the second highest discussed. The finding is also in consistent with earlier study revealed that lacking in evidence-based and inapplicability of guideline to be used in clinical setting to be the barrier (Ismaile, 2014). From the focus groups discussion, it appeared that majority of the physical therapists thought that the appearance and contents of guidelines generally does not fit in with their practical learning methods.
The disagreement towards practice guideline might be due to some of the components were unclear or confusing, and too complex in which it is not easy to apply in daily practice (Lugtenberg et al., 2009). The aberration components therefore making them disinterest in practicing it. For instance, in terms of infection control in disposal of blood products during wet cupping, it is mentioned to be intricated when they need to call for the third party to dispose it. It would be easier to dispose it at any domestic waste bin as in their opinion. Without supported evidence such as comparative feedback on their performance, the practitioners would tend to keep on trusting their professional experience and rely on their own judgements rather than following the guideline.

**Lack of feeling expectancy / Lack of motivation**

In the lack of feeling expectancy, the practitioners tend to have difficult feelings to follow the guideline, meanwhile lack of motivation described about impediment in changing habits. Provocation of difficult feeling may utterly affect in changing habits. This may possibly be due to moving from previous ways of doing things is tough and undeniably a resistance to change. This finding is in line with available prior exploration studies conducted in Houston, United States, expressing that some of the respondents revealed that changing from long-standing habits on everyday practice to new guideline initiation were a challenged (Cavazos et al., 2008). In another study, 35% of the general practitioners (GPs) reported difficulties in changing routines and habits to follow guidelines survey among general practitioners in Netherlands (Lugtenberg et al., 2011). This can be due to unfamiliarity, disagreement with guideline components or overestimation of current quality of care. The need of extra effort in understanding and applying the guideline might also become the reasons.

**Surrender to God (Allah)/ tawakkal**

There was a newly emerged theme regarded as barrier, namely surrender (redha / tawakkal). Surrender in spirituality and religion as according to Islam is when a person is abides by the 5 Pillars of Islam (Syahadah, Salat, Zakat, Fasting and Hajj), and completely submitting one’s will to God (Nygard, 1996). They should strive for excellence after full measurements have been employed. However, surrender concept that has been applied among some of the practitioners was not appropriate where they utterly believed in the concept without practicing a proper guidance. For example, some of them did not wear gloves when touching blood or bodily fluid to protect themselves from infection, enough with only praying not to be infected.
All participants were Muslim, and they are familiar with the quote keep trying and leave the rest to Allah/God. As stated in the Quran Surah At-Talaq 65: verse 3 showed that “and whoever relies upon Allah, He will be enough for him”. This is the concept of reliance to Allah/God alone or a perfect trust in God’s plan. This can be described as spiritual state in being tawakkal or rely solely in God’s plan. However, this need to be in line with the presence of effort and trying our best before leave everything to Allah. Islam encouraged their worshippers to do as much as they can before making du’a (prayers), surrender and accept. This is in consistent with the act of adhering to practice guideline in treating patients before being surrender to Allah and asking help to protect themselves from any harms or diseases. In Islam, tawakkal is related to the spirit of striving and working. It is a duo concept that requires the presence of both components to appropriately function. Without effort in adhering to practice guideline while treating patients, tawakkal become futile and vice versa. Tawakkal should not be an excuse to justify their non-adherence to practice guideline, as the true concept is to have faith in whatever happened only after all efforts have been performed. This newly developed theme was in consistent with previous study conducted in Indonesian, where the same theme of ‘surrender and accept’ was emerged in exploring how religion influence in managing diabetes self-care (Permana et al., 2019). Malaysia has an equal setting as in Indonesia where majority of the population was Muslim.

External barriers

The most prevalent factor emerged was the environmental constraint, however none was mentioned about guideline and patient-related barriers.

Environmental/ Setting-related – lack of time

The findings in this study are in line with earlier qualitative research conducted among nurses in Australian tertiary hospital, revealed that in relation to performing handwashing before and after dealing with patients as stated in the guideline, time constraint emerged as a barrier (Lin et al., 2019). The reason was because they were fully occupied with procedures and ward rounds which eventually, made them distracted and overlooked in regards with handwashing procedure. A dreadful workload among the nurses utterly hindered them from sticking to the guideline.

In another study conducted among Palestinian healthcare workers through focus group discussion, mentioned that time constraint as one of the major reasons hampering them from
implementing the guideline (Radwan et al., 2018). This is in consistent with current study, where due to the urgency to treat patients, challenged them to comply with every recommendation.

**Lack of other practice resources, increased costs**

Additional explored external barrier to guideline use were increased cost and lack of practice resources. As mentioned in the findings, it was in coherent with available studies revealed that it was really difficult and burdensome to uptake policy due to poor resources (Donnellan et al., 2013). Poor resources imply to insufficient materials, staff, or reimbursement, and cannot cover for the increased cost incurred following to the guideline. All participants in current study agreed to describe resource inadequacy as the main barrier to adopt the guideline and to ensure best care in cupping patients. In any organization, constraint resource is a common circumstance but need to be tackled efficiently for an optimum result (Donnellan et al., 2013).

Moreover, another study is in agreeable with current study, where 69 out of 256 studies came out with emerged themes on lack of resources and time as barrier to guideline implementation (Cochrane et al., 2007; Lugtenberg et al., 2009). A similar theme was elicited from prior study conducted among healthcare workers in primary healthcare clinics in measuring barriers to practice guidelines, where environmental factors which emphasized on lack of resources to be the protruding barrier identified (Radwan et al., 2018). Limited resources such as the shortage of medical supplies and appliances such as gloves and other personal protective gears, cups sterilizer, and others was challenging and had disturbed the process of patients’ treatment, and this is against the guideline policy.

As mentioned by the respondents, every cupping premise need to cater for non-clinical support services such as *Radicare* to manage clinical waste products in a proper manner. However, this decision would incur a lot of money, thus inhibits them from adhering to practice guideline. Alternatively, disposing the blood by burying them into the ground or throwing away in domestic bin are way much cheaper.

**Increased malpractice liability**

Practice guideline is a tool protocol that has been systematically developed to assist in decision making and to enhance the quality and safety of procedures given. If any malpractice were to happen, this practice guideline can be an information source and able to determine whether
the practice is in congruent with acceptable standards. As according to Cabana et al.’s framework, one of the barriers impede the practitioners from adhering to practice guideline is increased malpractice liability, that is the risk of legal actions. Majority of the practitioners were aware on the upcoming act (Act 775) implementation to regulate the traditional and complimentary medicine services in Malaysia. The participants mentioned that it is a good measure in controlling aberrations of practices for the benefits of the patients. It was started with the mandatory registration of all TCM practitioners under MOH to monitor all sorts of treatment modalities. At the same time, they were anxious as well, hoping that they will not get penalized due to nonadherence to practice guidelines. To overcome this, regular audit and feedback such as through observations and field visits are helpful in keeping the cupping practitioners adhering to practice guidelines (Radwan et al., 2018).

5.0 LIMITATION, RECOMMENDATION AND CONCLUSION

This study has few strengths. Firstly, this research has become the pioneer in exploring barriers against practice guideline use among cupping practitioners in Malaysia. The cupping guideline has been devised in 2011 by Ministry of Health, Malaysia but as of now no study has been implemented to assess the adherence to practice guideline and its barriers, hence this is the outcome. Another strength of this study is that we used a theory-based approach, in which Cabana et al. Clinical Practice Guideline Framework for Improvement has been used. This theory was able to tailor for individual barriers and can be used to pitch the intervention accordingly.

On the other hand, some limitations were identified, where one of it was lack of participants involved in the interview. The number of participants from various backgrounds need to be increased to have richer understanding, thought and groundedness regarding to the issues. More number of practitioners from greater boundaries such as Sabah and Sarawak should also be included to have greater exploration. In addition, it would be great if this study able to include observational method despite in depth interview alone to validate the adherence components towards practice guideline. Though, triangulation technique has been done to validate the data.

This study aimed to explore barriers hindering cupping practitioners from adhering to practice guidelines. Based on the analysis, it is concluded that framework by Cabana et al. was effective in determining the objectives. The thematic analysis revealed that the prominent barrier emerged was setting-related, which include increased cost, lack of practice resources and lack of
time. Another protruding barrier remarked was knowledge related. Furthermore, being surrender or tawakkal is notified as a newly emerged barrier from the analysis.

Specific measures addressing those should be disseminated and implemented. One of the methods is to streamline educational training to enhance guideline familiarity, specifically on each component of it. Training and education are essential to promote the usage of guideline, while mass communication is needed to convey the existence of guideline. Besides, it is important to have a reminder system that able to send out messages or notification to encourage guideline use. Notification pop-out indeed would help them to be updated. Additionally, guideline dissemination also crucial in which diversity of ways were expected such as through email, face-to face session and management chain.
References


Medicine, T. and C. (2016). *LAWS OF MALAYSIA Act 775*.


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