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## Issue in Applying Occupation-based Intervention in Clinical Practice: A Delphi study

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### Abstract

A Delphi study with three rounds of inquiry was conducted to identify the challenges of implementing Occupation-based Intervention (OBI) in occupational therapy practice in Malaysia. Fifteen occupational therapy practitioners and educators consented and completed all the Delphi rounds. The first Delphi round began with an open-ended questionnaire asking the participants a broad question on issues for applying OBI into clinical practice. Data was qualitatively analysed to develop statements about the issues of applying OBI were grouped under five categories: client factors, occupational therapist factors, contextual factors, occupation as treatment modalities and logistic issues. In the second and third round, the participants were asked to rank their agreement with the statements about the challenges in applying OBI. Level of consensus was set for this study at  $\geq 70\%$  and twenty-seven statements finally achieved the pre-set consensus level.

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**Keywords:** Delphi technique; occupational therapy; occupations; activities of daily living

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## 1. Introduction

Since the early 20th century, occupational therapists have been using occupation as their primary intervention medium for people with mental illness and physical disability. The development of the profession was influenced by the moral treatment that prevailed in the 18th and 19th centuries as a therapy for people who were mentally ill. The assumption of the moral treatment was that engagement in various daily occupations could restore the individual's health and functioning (Keilhofner, 2009). Occupation includes: Activities of Daily Living (ADLs), Instrumental Activities of Daily Living (IADLs), work, education, play, leisure, rest and sleep, and social participation (American Occupational Therapy Association, 2014). Occupational therapists continued using occupation as the core therapeutic means of intervention until the profession was pressured by the modern biomedical model that insisted on providing rationale for practice, which led to development of the mechanistic paradigm (Keilhofner, 2009). The influence of this mechanistic paradigm had caused occupational therapists to distance themselves from using occupation and its more holistic process to the mechanistic paradigm that tends to focus on understanding and addressing body functions and impairments (Keilhofner, 2009).

Malaysian occupational therapist perceived OBI as a means and as an end (Che Daud, Yau, & Barnett, in press). Occupation as a means refers to occupation as an agent to improve impaired function, while occupation as an end refers to occupation to be accomplished by the clients (Gray, 1998; Trombly, 1995). The benefits of OBI has been well documented in the literature. For instance, a recent study found OBI was effective in improving ADLs and quality of life for the clients with stroke (Shinohara, Yamada, Kobayashi, & Forsyth, 2012). Although OBI benefits the clients, there are challenges for many occupational therapists to use OBI within their practice context, particularly for those who are working in the medically-oriented facilities. This study aimed to identify issues in applying OBI in clinical practice.

## 2. Literature review

Several challenges in applying OBI were identified in literature. One of these challenges is the dominance of the biomedical model in health care practice (Colaizzi & Provident, 2010). This mechanistic paradigm that was derived from the biomedical model had diverted the central idea of the profession, which was to concentrate on occupation as a health-restoring measure and to focus on remediation of body functions and impairments (Keilhofner, 2009). As the biomedical model mainly focused on curing disease by reducing impairments and eliminating symptoms, practising occupational therapy in medically-oriented facilities led to the impairment-based treatment practice where the body functions and impairments became the primary outcome of the intervention (Gray, 1998). It is also difficult to incorporate health, wellness and functions within the medical paradigm of care (Baum & Baptise, 2002). For instance, occupational therapists found it was difficult to fit occupations such as play, cooking, craft, self-care routine and pleasurable activities within the biomedical model dominated setting as it was felt that these tasks were not scientific enough to address body functions and impairments of the clients (Burke, 2001). As a result, occupational therapists tended to neglect the use of occupation in practice, which may have indirectly contributed to the profession struggling with professional identity (Gollidge, 1998a; Gray, 1998).

Lack of facilities was another issue in applying OBI in clinical practice. A study conducted by Stack and Barker (2011) found that the occupational therapy students would eagerly translate OBI in practice setting, but environmental factors prevented them from doing that. Limited space and the availability of equipment and supplies were the main issues highlighted by occupational therapists in their use of OBI (Chisholm, Dolhi, & Schreiber, 2004). As the settings are built up in the medical-oriented facilities, most of the available equipment is focused on remediating impairments and body functions. Pragmatically, occupational therapists often use what is typically available in the department or clinical setting (Gray, 1998). Equipping a department that is suitable for OBI requires funding from the organisation. However, not all organizations could provide the money or the equipment, and these supplies are lacking in the practice setting (Chisholm et al., 2004).

Time was also a factor that influences the occupational therapists to use OBI. Literature indicates that OBI was described as too complicated and consumes much time to be implemented (Goldstein-Lohman, Kratz, & Pierce, 2003; Stack & Barker, 2011). Occupational therapists also agree that they could do more for the clients. However, addressing each client's occupational needs takes more time and results in another client not receiving an

intervention in a timely manner (Stack & Barker, 2011). Occupational therapists who are practicing in an acute setting, such as in hand injury rehabilitation are expected to provide impairment-based treatment instead of OBI. Given the high volumes of caseload and the role expectations in the clinical practice setting, occupational therapists tend to see time as a major obstacle to using OBI (Colaianne & Provident, 2010; Stack & Barker, 2011).

The issue of reimbursement is also a barrier to applying OBI. For instance, occupational therapists in the United States reported that OBI was not covered by insurance companies and documenting the intervention for billing purposes was difficult (Colaianne & Provident, 2010). Rogers (2007) described that billing for OBI is not straightforward and that occupational therapists have to explain to the insurance companies why they have provided the clients with that specific intervention. As a result, there is a lack of opportunity for the occupational therapists to explore the occupational performance problems and to identify the barriers to successful occupational performance within the client's context (Toth-Fejel, Toth-Fejel, & Hedricks, 1998).

Another challenge to OBI in the literature was the client and occupational therapist factors. Occupational therapists reported that providing OBI is challenging because the client does not understand the unique role of occupational therapy nor the outcome of the intervention (Chisholm et al., 2004). From occupational therapists' perspectives, they have much less understanding of the environmental concept of objects, spaces and occupational forms, which contribute to the challenge of using OBI (Lee, Taylor, Kielhofner, & Fisher, 2008). Providing OBI requires the occupational therapist to know more about the client's context and to use appropriate interventions to achieve occupational performance goals. Additionally, occupational therapists often undermined the value and power of occupation in rehabilitating the clients (Chisholm et al., 2004). They think that occupation cannot meet the client's goal, and is unnecessary and too complicated for the clients (Colaianne & Provident, 2010).

In short, the dominant biomedical model of care in practice context, reimbursement, time, clients and occupational therapists are barriers to applying OBI. Occupational therapists agreed that OBI was important for maintaining the unique identity of the profession, but little time is spent in adopting it in practice (Colaianne & Provident, 2010; Rogers, 2007). Most Malaysian occupational therapists are working in medically-oriented settings such as hospitals and health clinics, where the provision of OBI is challenging (Aiken, Fourt, Cheng, & Polatajko, 2011). Given there are no published studies conducted in Malaysia regarding this issue, the aim of this study was to identify issues in applying OBI in clinical practice.

### **3. Methodology and results**

#### *3.1. Design*

A Delphi technique with three rounds of inquiry was conducted to identify the challenges of applying OBI in Malaysian occupational therapy practice. This technique is efficiently used when there are contradictory and insufficient facts about a certain issue (Hasson, Keeney, & McKenna, 2000). The Delphi technique is a mixed method approach, and often begins with qualitative data collection and is followed by quantitative data collection (Keeney, Hasson, & McKenna, 2001). There are three types of Delphi technique, namely conventional, real-time and policy (De Villiers, De Villiers, & Kent, 2005). This study employed the conventional Delphi technique, in which an open-ended questionnaire was sent to a group of experts in the first round and then followed by a close-ended questionnaire in the subsequent rounds. This technique was used because there is insufficient information about the challenges encountered by Malaysian occupational therapists in applying OBI. Due to the nature of Delphi technique, which involves an iterative process, it is hard to separate the methods and results in different sections. This study was approved by the Human Research Ethics Committee of James Cook University (H4559), Institute of Public Health Malaysia (NMRR-12-53-10918) and the Economic Planning Unit Malaysia (UPE:40/200/19/2865). The first part of this study that was aimed to seek a consensus definition of OBI and was published in the *British Journal of Occupational Therapy* (Che Daud et al., in press).

### 3.2. Participants

This study used purposive sampling to select expert occupational therapists in Malaysia. According to Malaysian Occupational Therapist Association (MOTA) (2010), there were 213 occupational therapists employed within Ministry of Health Malaysia (MOH) facilities and most of them were based in the public hospitals. An expert, as defined in this study, is a person who holds a senior position at work (Kuipers & Grice, 2009) and was nominated by peers to have pertinent expertiseneess in certain areas of professional specialty (Jensen, Gwyer, & Shepard, 2000). Additionally, Unsworth (2001) differentiated the novice and expert occupational therapist by years of experience, where the experts were described as having at least five years' experience in the occupational therapy field. Therefore, the inclusion was set as: (i) occupational therapy practitioners and educators who are holding a senior position; (ii) qualified at least with a bachelor's degree in occupational therapy; and (3) have at least 5 years' experience in the field of occupational therapy practice. Initially, lists of occupational therapy practitioners and educators who met the inclusion criteria were obtained from Head of Malaysia Occupational Therapy Service and President of MOTA. A simple survey was conducted by inviting occupational therapists from various backgrounds to nominate the occupational therapy experts in Malaysia. A list was compiled, consisting of 52 eligible occupational therapy practitioners and educators. An invitation letter was sent to all eligible participants in the middle of June 2012. Fifteen occupational therapy practitioners and educators consented to take part in the study. All the participants completed all Delphi rounds. Most of the participants were senior occupational therapy practitioners (n=8) and educators (n=7) with more than five years' experience in clinical practice. The range of the participant's age was between 29 to 49 years old. Ten of the participants were qualified with a Bachelor's Degree, three with a Master's Degree and two with a Doctor of Philosophy.

### 3.3. Data collection procedure

Data was collected using the Google form survey, which is a free online survey from Google that allows the responses to be collected in spreadsheet form. The participants were given four weeks to complete the questionnaire for each round. An email was sent to all participants one week before the due date to remind them to complete the questionnaire for each round.

### 3.4. Round 1

In early July 2012, the first questionnaire's link was sent to all participants who consented to take part in the study. It was an open-ended questionnaire that asked the participants a broad question about the challenges of applying OBI in clinical practice. The function of the first round was to identify the issues that could be brought forward to later rounds and used open-ended questions to increase the richness of the data collected (Powell, 2003). Additionally, participants' demographic details such as gender, age, professional qualifications, position and clinical experience were obtained during this Delphi round. The responses were analysed using simplified Colaizzi's thematic analysis (Creswell, 2007). Five categories emerged from the analysis of first round questionnaire namely: the client factors, occupational therapist factors, contextual factors, occupation as treatment modalities and logistic issues. Forty-two statements were developed under these categories to formulate the second round questionnaire. Before the second round questionnaire was sent to participants, it was pilot-tested to three occupational therapists to improve the clarity and to eliminate any ambiguity in the sentences.

### 3.5. Round 2

At the end of August 2012, the second round questionnaire's link was sent to the participants. They were asked to rank their agreement with the statement generated from the data collected in the first round using four-point Likert type scale from: (1) totally disagree; (2) disagree; (3) agree; and (4) totally agree (Mullersdorf & Ivarsson, 2011), on the issues in applying OBI. The participants were also allowed to comment on the statements and add new information about the issue studied. Data was analysed using IBM SPSS version 20.0 by calculating the percentage of agreement for each statement. The level of consensus was set at  $\geq 70\%$ , which meant that two-thirds of the

participants must agree to strongly agree with each of statements (Keeney, Hasson, & McKenna, 2006; Mullersdorf & Ivarsson, 2011). The comments and new information from participants were analysed and synthesised to improve the statements or if appropriate to develop new statements. Analysis of the second round survey found that eighteen out of forty-two statements achieved the pre-consensus level (Table 1). A perfect consensus (100%) achieved on the Statement number 7 and 40 that the client does not understand about the whole recovery process and that providing a treatment context similar to the client's environment was difficult. Two participants added new information, which led to the development of two new statements. One statement was included under the occupational therapy factors, and the other statement was included under the contextual factors category. One participant commented on Statement number 39 where the word "Ministry of Health Malaysia" was changed to "Malaysian Occupational Therapist Association" because the role of the association is to provide guidelines about OBI.

Table 1. Consensus on issues in implementing occupation-based intervention in Malaysia occupational therapy practice (N=15)

No statement	R2†	R3‡	Net change between R2 & R3
<b>Category 1: The client factors</b>			
1. The client does not value 'independence' in daily living.	46.7	60.0	+2
2. The client is not really bothered about the outcome of intervention.	33.3	40.0	+1
3. The client is more impressed and motivated by sophisticated and advanced equipment.	86.7	80.0	-1
4. The client is not interested in carrying out occupation-based intervention.	60.0	53.3	-1
5. The client is not motivated to do the occupation-based intervention.	60.0	66.7	+1
6. The client does not understand the purpose of the occupation-based intervention.	80.0	73.3	-1
7. The clients' understanding of the recovery process; e.g. the client is not ready to engage in occupations until they gain maximal level of strength, and is fully recovered.	100	100	0
8. It is difficult to obtain the cooperation of client when practising occupation-based intervention.	40.0	53.3	+2
<b>Category 2: The occupational therapist factors</b>			
9. Occupational therapists rarely use a client-centred approach in practice.§	-	73.3	0
10. Skill and knowledge in applying a client-centred approach is lacking among occupational therapists.	66.7	93.3	+4
11. Occupational therapists lack the creativity skills to practise occupation-based intervention.	93.3	93.3	0
12. Skill in grading activities is lacking among occupational therapists.	80.0	80.0	-
13. Basic skills in activity analysis are lacking among occupational therapists.	60.7	73.3	+2
14. Occupational therapists are not able to link preparatory/adjunctive methods to occupational performance.	60.0	53.3	-1
15. Occupational therapist rarely uses occupation-based assessment in daily clinical practice.	66.7	93.3	+4
16. Occupational therapists have limited knowledge and understanding about occupation-based intervention.	86.7	73.3	-2
17. Occupational therapists are not sufficiently well prepared and well trained to practise occupation-based intervention.	73.3	80.0	+1
18. Occupational therapists have negative attitudes toward occupation-based intervention.	53.3	40.0	-2
19. Occupational therapists underestimate the value and power of occupation.	53.3	53.3	0

† % of consensus for Round 2

‡ % of consensus for Round 3

§ New statement generated

**Category 3: The contextual factors**

20.	The Malaysian cultural value of relying on family members to serve the sick client is a challenge to occupation-based intervention.	86.7	93.3	+1
21.	Bureaucracy and power differential in Malaysia Healthcare System; e.g. occupational therapists have to follow doctor's order. <sup>§</sup>	-	100	0
22.	The dominance of the biomedical model in healthcare delivery makes it difficult to practice occupation-based intervention.	80.0	93.3	+2
23.	Lack of awareness about the role of the occupational therapist by other professionals limits referral for occupation-based intervention.	86.7	93.3	+1
24.	Multidisciplinary members always perceive that movements and strength are essential requirements for function.	93.3	93.3	0
25.	Multidisciplinary members do not understand the purpose of occupation-based intervention.	80.0	80.0	0
26.	Lack of cooperation from other multidisciplinary members makes it difficult to practise occupation-based intervention.	46.6	73.3	+4
27.	Practising occupation-based intervention makes occupational therapy services less significant than other multidisciplinary professionals.	20.0	13.3	-1
28.	Occupational therapy will not be competitive or useful in modern healthcare if practitioners only using occupation-based intervention.	20.0	26.7	+1

**Category 4: Occupation as treatment modalities**

29.	Occupation-based intervention is less useful and meaningful to the client.	26.7	26.7	0
30.	Limited evidence on the efficacy of occupation-based intervention.	60.0	86.7	+4
31.	Occupation-based intervention is less practical in an acute care setting.	66.6	80.0	+2
32.	Occupation-based intervention is outdated if used for a long period of time.	33.3	20.0	-2
33.	Occupation-based intervention is less attractive.	46.7	33.3	-2
34.	Providing good, observable and measurable outcomes in the domain of occupation is difficult.	73.3	73.3	0
35.	Balancing the use of occupation-based intervention and preparatory methods in practice is difficult.	53.3	60.0	+1

**Category 5: Logistic issues**

36.	Documenting and reporting occupation-based intervention is difficult.	53.3	46.7	-1
37.	Practising occupation-based intervention consumes a lot of time.	66.7	80.0	+2
38.	Practising occupation-based intervention is difficult due to time constraints and heavy workloads.	86.7	73.3	-2
39.	Lack of specific guidelines offered by the Malaysian Occupational Therapist Association (MOTA) on occupation-based intervention. <sup>**</sup>	86.6	80.0	+1
40.	Providing a similar context and environment in which the client's occupations take place is challenging.	100	100	0
41.	The department is not set up for practising occupation-based intervention.	86.7	86.7	0
42.	Appropriate equipment and sources for practicing occupation-based intervention are lacking.	86.7	86.7	0
43.	Practising occupation-based intervention demands more space.	60.0	33.3	+4
44.	No occupation-based assessment is available to be used in the department.	40.0	53.3	+2

**3.6. Round 3**

In the middle of October 2012, the link of the third round survey was sent to all participants. The participants again were asked to rank their agreement to achieve the final consensus about the statements on challenges of using OBI but were limited to agree or disagree. The level of consensus was set the same as the second round. An analysis

<sup>\*\*</sup>Statement rephrased



of the second round survey was also supplied to help participants refine their responses. A comment box was provided at the end of the survey for participants to comment and add new information about the issues of applying OBI. Nine more statements achieved the pre-set consensus level in the third round. Two participants changed their responses on the Statements number 13, 31 and 37, and four participants made changes on the Statement number 10, 15, 26 and 30 until consensus was achieved for these statements in the third round. Total statements that achieved pre-set consensus were twenty-seven. Consensus of 100% was achieved for the Statements number 7, 21 and 40, where participants agreed that the client's understanding of recovery process, health care system in Malaysia and providing treatment context similar to client's needs were the most challenging part to practise OBI. Seventeen statements did not achieve the pre-set consensus level (Table 1).

#### 4. Discussion

The key findings of this study identified the challenges that occupational therapists encountered in providing OBI to clients in a Malaysian healthcare context. These challenges should be addressed or eliminated to provide a better intervention outcome and to increase the client's satisfaction (Colaianne & Provident, 2010; Gray, 1998). OBI is not just a benefit for the clients, but the occupational therapists found it is more satisfying, rewarding, effective and individualized (Estes & Pierce, 2012).

##### 4.1. Challenges of applying occupation-based intervention

This study found several issues to OBI in the Malaysian context. One of the challenges came from the client factors. This study supports the previous findings that the client does not understand the purpose of OBI, which contributed to the challenges of applying the intervention in a practice context (Chisholm et al., 2004; Colaianne & Provident, 2010). Furthermore, the clients also have no idea about the unique role of occupational therapy and are not aware of the effect of OBI (Chisholm et al., 2004). The client's understanding of the whole recovery process was also cited as a challenge to OBI. As stated by participant 11 "The problem is the clients have no idea when they could engage in their daily occupations. They believe that movement and strength are an essential requirement for function. They stopped all their daily occupation until their conditions are fully recovered". Another challenge from the clients was that they were more impressed and motivated by sophisticated and advanced equipment. In contrast, OBI only uses materials related to the client's occupation. One of the participants stated:

"Occupation-based intervention is less attractive, resulting in low interest and poor motivation from the clients. Some patients are more impressed and motivated with sophisticated and high technology equipment, which is rarely used in occupation-based intervention"--Participant 1

Challenges to OBI also came from the occupational therapists themselves (occupational therapy factors). Participants described that they were not trained or well prepared for OBI. In fact, they have limited knowledge and understanding about OBI. Occupational therapists who used impairment-based treatment usually was influenced by previous training and clinical experience (Goldstein-Lohman et al., 2003). They also agreed that they lacked skills in grading and analysing activities, which is an important aspect of providing OBI. The participants perceived that they also lacked the creative skills to implement OBI. These results support the statement that the credibility of occupational therapists is the challenge to OBI (Colaianne & Provident, 2010).

Providing OBI required the occupational therapist to know the client's occupation, motivation and life situation (Baum, 2000), which only can be achieved through the use of a client-centred approach and working partnership with the clients (Baum & Baptise, 2002; Chisholm et al., 2004). However, the majority of participants admitted that Malaysian occupational therapists rarely use the client-centred approach in practice, which is a challenge to OBI. The perceived challenge was related to the skills and knowledge lacking in applying the client-centred approach among the occupational therapists. Additionally, most of the participants admitted that they rarely use occupation-based assessment in practice. Therefore, the intervention is not focused on settling the client's occupational performance needs.

This study also identified few contextual factors that restrict occupational therapists to provide OBI. First was the Malaysian cultural value, where the family members feel obligated to help the clients in their daily occupations. Participant 15 stated that “The client normally comes to the clinic with their family members or maids. When I teach the clients how to dress or feed themselves, the maids or family members would said “Don’t worry, I will do it for him/her” (sic). That’s the challenge I often face”. It has been reported that families of Asian clients tend to be overinvolved, and even might take over the client’s responsibilities and make decisions on behalf of the clients (Nilchaikovit, Hill, & Holland, 1993). A second factor was the health care system and government policy in Malaysia (Chisholm et al., 2004). The participants described that the medically-oriented health care services and the bureaucratic culture within Malaysia hospitals were also challenges to OBI. The ultimate treatment goal is to cure the impairments without considering other issues, and the occupational therapist is obligated to follow the doctor’s instruction as they are higher in the health professional hierarchy in Malaysia.

Another issue to OBI within medical-oriented facilities was the health professionals’ view about the diagnosis. For instance, Participant 11 stated that “the multidisciplinary members always perceive movement and strength are the main requirements for function”. Other elements such as the client’s ability to perform daily occupations and how the client’s context affects occupational performance are often neglected. Furthermore, lack of awareness about the role of occupational therapists by other professionals was perceived as a challenge to OBI as this limits the referrals for the intervention. Most of the participants stated that when they try to use OBI in practice, other multidisciplinary professionals do not give full cooperation because they do not understand the purpose of OBI (Chisholm et al., 2004; Colaianni & Provident, 2010).

The credibility of occupation as a treatment modality was also perceived by the participants as a challenge to OBI. They asserted that there was limited evidence on the efficacy of OBI to support their practice (Colaianni & Provident, 2010). Furthermore, occupational therapists think that certain OBI is not practical for the acute setting. Participants 7 said, “One of my clients eagerly wanted to play golf again following an ulna radius fracture. I could not train the patient to play in the department. It is not practical in my clinical setting”. Additionally, occupations as the ultimate goal are hard to achieve and complex to measure (Coster, 2008). The following statement explains:

“I think providing good, observable and measurable outcomes in the domain of occupation is challenging. Sometimes, I have no idea how to do it”--Participant 6

Logistics issues also influence the capability of occupational therapists to provide OBI. Time and workload were reported as challenges to implementing the intervention (Colaianni & Provident, 2010; Stack & Barker, 2011). The participants claimed that practising OBI consumed more time, but they do not have time for that because of the high volume of caseloads per day. Guidelines about OBI from the MOTA also were not available for occupational therapists to make proper referrals. Logistic issues such as resources, equipment, and the environmental context were also reported as barriers to OBI (Chisholm et al., 2004; Colaianni & Provident, 2010; Goldstein-Lohman et al., 2003). The majority of participants agreed that appropriate resources and equipment are lacking, and the occupational therapy department is not set up for OBI. The available resources and equipment were mainly for impairment-based treatment. One of the participants stated:

“Because the department is not built for occupation-based intervention, it is difficult for me to provide the treatment environment similar to the context where the client’s occupation takes place”-- Participant 10

#### *4.2. Implication for practice: Realising occupation-based intervention in Malaysia*

The findings of this study suggested potential solutions to the challenges of applying OBI in the Malaysian practice context. The credibility of occupation as a treatment modality can be resolved by research (Colaianni & Provident, 2010). More research on the efficacy of occupation both as a means and as an end should be implemented to support occupational therapy practice. Logistics issues such as time constraints, high workload, limited equipment and resources and environmental restrictions can be addressed through reflection practice (Rogers, 2007). The occupational therapists need to reflect on how they could improve their practice and be more occupation-based by using the challenges as an opportunity to improve practice. Time and client appointments should be appropriately



scheduled to allow enough time for OBI. If the resources or materials for OBI are not available in the department, the occupational therapists can ask the clients to bring their own devices to the clinic during the appointment session (Chisholm et al., 2004). Otherwise, occupational therapists may try to do intervention in the client's context such as at home, workplace, school or playground. When the intervention is delivered in the client's context, occupational therapists will have an opportunity to notice any environmental barriers to occupational performance and then the clients are not required to transfer the skills they learned in the clinic to their context (Pierce, 2001).

Education to the clients and caregivers should be done to enhance their understanding of OBI and the whole rehabilitation process. Adequate explanations about how OBI can improve their health and wellness are needed. Issues related to lack of knowledge and skills among the occupational therapists can be tackled by providing training and education about OBI and client-centred approach to occupational therapists. Seminars, workshops, direct clinical training, mentoring and other continuous education may encourage occupational therapists to use the OBI in practice. Occupational therapists should also adopt occupation and purposeful activities as a core intervention and limit the use of remediation activities. Adoption of occupation and purposeful activities may avoid duplication of skills between other health professionals and emphasise the unique identity of occupational therapy (Golledge, 1998b). The dominance of the biomedical model and the organisational policy in the Malaysian healthcare system may not be easily changed. However, occupational therapists can disseminate the messages about the services they provide through education and promotion to other multidisciplinary professionals. Occupational therapists need to share their expertise with others about their role so that it can improve understanding and cooperation from other health professionals and increase referral numbers for OBI.

#### *4.3. Limitations of study*

However, the limitation of the study was the small sample size where 15 out of 52 eligible participants consented to take part in the study. The strict inclusion criteria in the definition of expert resulted in few eligible Malaysian occupational therapists able to participate in the study. Only occupational therapists under Ministry of Health Malaysia were nominated by peers as experts because they were the majority in practice. Therefore, the findings may not reflect the challenges faced by the occupational therapists in non-government settings and private practice. Additionally, the Delphi technique only allows anonymous interaction that is restricted to the topic to be explored further. The findings reflected the common challenges to OBI regardless of practice area.

### **5. Conclusion**

This study identified the challenges encountered by occupational therapists in applying OBI into the Malaysian practice context. The client and occupational therapist factors, logistic issues, the credibility of occupation and contextual factors are challenges to implementing OBI in clinical practice. These challenges need to be solved to provide better treatment outcomes for the client where OBI helps to enhance the quality of life following a health event or disease. Reflective practice, research, education, promotion, and training may be the potential solutions to these issues. Applying the adoption of OBI into practice creates occupational therapy as a unique, holistic and more client-centred approach. Additionally, practising OBI allows occupational therapists to maintain their unique identity, which is centered on occupation to promote health, wellbeing and quality of life. Further qualitative research is needed to explore the experiences of occupational therapists providing OBI in a specific area of practice especially, in acute setting such as hand rehabilitation.

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