

# Educators' Preparedness towards Children Safety and Health in Malaysian Preschools and Kindergartens

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This research aims to explore educators' preparedness towards children safety and health in Malaysian preschools and kindergartens. **Methodology:** 13 group interviews were carried out among educators from registered kindergartens (5-6 years) and preschools (0-4 years) which were selected based on purposive sampling technique. By using thematic analysis, data were transcribed in verbatim to be coded and categorised and finally, two themes were identified that were knowledge and practice. **Findings:** This study found evidence that educators in Malaysian registered preschools and kindergartens are well prepared in terms of safety and health knowledge and practice. They implemented appropriate procedures related to the cleanliness of school premises, sending and picking up procedure, food preparation, health screening, and first aid. **Applications:** This study implies that ECCE agencies need to make sure all preschools and kindergartens are registered so that their educators receive proper training on safety and health. In addition to that, there should be enforcement for more frequent monitoring of appropriate safety, and health practices are conducted at registered preschools and kindergartens. **Novelty:** This is the first attempt to develop a health and safety preparedness framework of early childhood educators in Malaysia. Malaysian ECCE educators are well-prepared in terms of knowledge and practice for health and safety issues at child care institutions.



**Key words:** *Early Childhood Education, Children Safety, Children Health, Educators' Preparedness, Risk Management, Childcare.*

## **Introduction**

### *Background*

Early childhood and care education (ECCE) act as one of the main drivers towards building a talented and innovative workforce for the new Malaysia economy. In order to achieve that, children safety and health emerged as the fundamental aspect that needs to be carefully taken care of particularly when cases of Malaysian children maltreatment raise to an alarming stage (Mutalib & Saleh, 2018). In 2018, the Malaysian Department of Statistics reported that 4300 children aged below 5 died compared to 800 children aged 1 to 4 years (Department of Statistics, 2018). 51,147 HFMD cases were recorded in Malaysia between January 1 and 14 August 2018 which caused 217 childcare centers and 223 kindergartens to be closed (Aliza Shah, 2018). In addition, the report also stated that only 3,173 of the 16,873 caregivers in Welfare Department list were certified (Aliza Shah, 2018) meaning that only about 19% of the caregivers and educators were professionally trained to create a safe environment where risks were appropriately managed. In a global comparative study of low- and middle-income countries, Columbia, Egypt and Pakistan were 95 percent, 87 percent and 83 percent respectively less likely to require hospital admission to treat children with unintentional injuries compared to Malaysia (He, Lunnen, Puvanachandra, Zia, & Hyder, 2014). Series of children mortality including Adam Rayqal Mohd Sufi (5 months old), Naufal Amsyar (10 months old) (Yong, 2018), Farisha Mohd Hasmuni (5 months old) (Nor Hayati Zainudin, 2016), Muhammad Aidil Amsyar Muhammad Hafizuddin (18 months old) (Muhammad Apendy Issahak, 2019) and many more which happened at childcare centers further strengthen the indication that current understanding about Malaysian ECCE educators' preparedness towards children safety and health is limited. These are just examples of cases involving child abuse and many more went unreported due to various reasons (Mutalib & Saleh, 2018). In addition, physical environment guideline for Malaysia ECCE institutions has yet to mature to limit physical injuries (Azhari, Qamaruzaman, Bajunid, & Hassan, 2015).

As a consequence, these cases increased parents' concerns about sending their children to childcare institutions. Based on prior researches, safety measures are an essential element in determining parents' choices of ECCE institutions for their children (Ansari, Pivnick, Gershoff, Crosnoe, & Orozco-Lapray, In press; Mustafa, Yunus, & Azman, 2014; Zainurin Dahari & Mohd Sabri Ya, 2011). The government and several agencies have geared towards improving children safety and health particularly by revamping the guidelines and monitoring for safety and health issues for example through Fundamental Childcare Course (Kursus Asuhan dan Didikan Awal Kanak-kanak Permata (KAP)) and Preschool Monitoring Inspection Guideline (Garis Panduan Pemeriksaan Pemantauan TASKA) check language

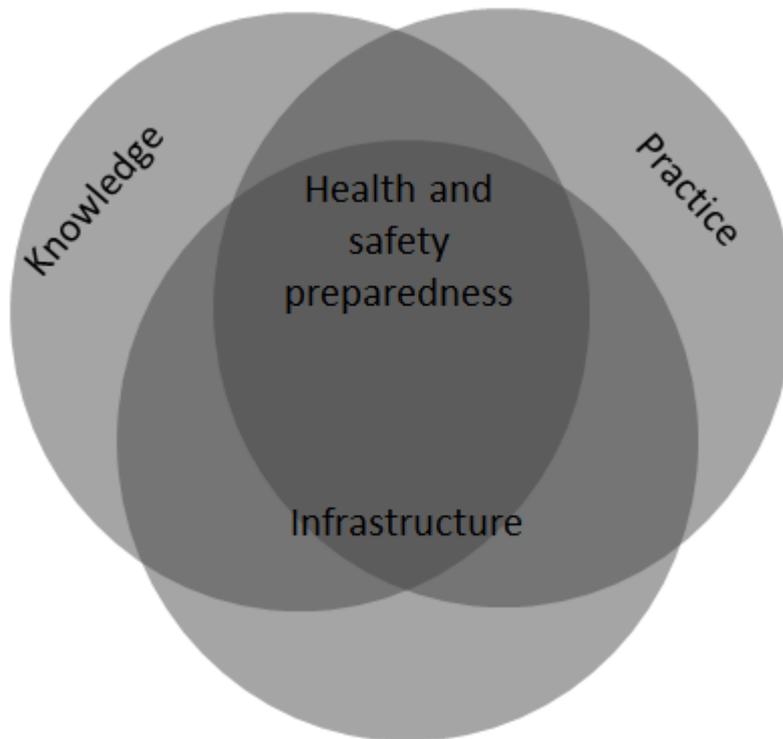
KursusAsuhanDanDidikanAwal Kanak-kanak PERMATA and Garis Panduan PemeriksaanPemantauanTaska [DONE] which is being carried out at least once a year for every registered childcare center. Despite the effort in increasing safety and healthcare quality in childcare centers, educators' preparedness towards this initiative is in question since there is limited evidence which documents educators' preparedness.

### ***Conceptual Framework***

Safety and health preparedness can be defined as readiness in terms of infrastructure, knowledge and skill about safety measures or emergency actions that should be performed to reduce the severity of injury and mortality risks. To authors' knowledge, there is yet an established conceptual framework which links the concept of infrastructure, knowledge and skill to represent the preparedness of ECCE educators. However, based on past studies (Alshehri, Alluwaim, & Alyahya, 2018; Bashir & Bakarman, 2014; Elaziz & Bakr, 2009; Ezeonu, Okike, Anyansi, & Ojukwu, 2017; Olympia, Weber, Brady, & Ho, 2017; Rao, Rao, & Shenoy, 2014), safety infrastructure, teachers' knowledge and skills towards safety and health related emergencies were repeatedly investigated to measure the preparedness of schools.

For instance, the researchers evaluated teachers' level of knowledge about first aid when dealing with bleeding from the nose (Alshehri, et al., 2018). In parallel, the preparedness of school staff towards health related issues was measured based on the knowledge and practice in first aid of the staff (Bashir & Bakarman, 2014). Another set of research further bolstered the need to incorporate knowledge as a construct in the health and safety preparedness framework when they revealed that majority of teachers and head of schools answered wrongly when questioned about health and safety issues (Rao, et al., 2014). On regards to the infrastructure, the availability of fire extinguisher, school clinic, school safety monitoring, and first aid box was considered as the primary indicators of preparedness towards health and emergency (Ezeonu, et al., 2017). The findings of earlier researches imply that infrastructure, knowledge and skill of educators are important constructs in determining the level of preparedness towards a healthy and safe environment for children. Therefore, the conceptual framework of this is shown in Figure 1.

**Figure 1.** Conceptual framework of health and safety preparedness in childcare institutions.



### ***Significance and Rationale of the Research***

The findings from this study are important for decision makers such as the ministry on understanding the important factors that underlie safe childcare institutions where these criteria should be taken into consideration when evaluating the existing regulations and guidelines on children health and safety at childcare institutions for improvements. Besides that, our study is also important for carers and educators, where it inculcates awareness on the level of their preparedness towards health and safety emergencies at their childcare institutions. Based on this awareness, carers and educators can take initiatives in providing safer childcare services such as by increasing their knowledge through training and applying the knowledge at their institutions. Parents may also benefit from this study as it gives ideas on how to choose childcare institutions that have the capacity to provide appropriate health and safety risk management. Most importantly, our findings may help to reduce the overall rate of accidents and mortality of children at childcare institutions.



## Literature Review

Safety education can be defined as the knowledge and skills that a teacher acquired for danger prediction and avoidance which results in a contribution of the safety of others (Kitamura, 2019). Among important elements in safety, education is (1) safety against crime in daily life, (2) disaster safety, and (3) traffic safety (Kitamura, 2019). Health and safety also include school premises, school buses, picking and dropping off children procedures, and emergency rescue plan (Konakli & Ülçetin, 2016). Teachers' preparedness towards children safety and health could also be linked to their knowledge and practice about first aid. First aid is an emergency measures taken right after an incident happened to a child, for example, falling, seizure or choking. First aid is important to ensure that immediate action is taken to minimise the effect of child injuries before getting more comprehensive examination and treatment at medical facilities. About 80 percent of ECCE educators had been in a situation where first aid was required by children (Ganfure, Ameya, Tamirat, Lencha, & Bikila, 2018).

Nevertheless, studies indicated that lack of safety knowledge among ECCE educators was quite common (see Table 1). For instance, in Baghdad, only 4 percent of 100 primary school teachers had good knowledge about first aid while 19 percent and 77 percent of them had fair and poor knowledge respectively (Al-Robaiaay, 2013). In specific, first aid knowledge about external bleeding and fracture was inadequate and poor among teachers in Baghdad (Al-Robaiaay, 2013). Meanwhile, in Ethiopia, only 40 percent of the research sample had sufficient first aid knowledgeable (Ganfure, et al., 2018). In addition, prior research also found a high level of preschool teachers' knowledge on typical childhood injuries despite little knowledge of health and safety (Wong, Li, Cheung, & Lam, 2015). In contrast, teachers in Oman showed satisfaction towards outdoor environment safety conditions (Ihmeideh & Al-Qaryouti, 2016). However, they were also eager to understand more about complying to safety requirement for outdoor preschool play areas (Ihmeideh & Al-Qaryouti, 2016).

Due to the nature of children who loves to play by running, climbing and jumping, dental injuries are also common among children. Despite that, 84 percent of ECCE educators in a research conducted in Massachusetts admitted that they had very low dental trauma management knowledge and the majority of them also was accountable for managing dental trauma (Sienkiewicz, Rainchuso, Boyd, & Giblin, 2017). Furthermore, research performed in Brazil confirmed that 93.9 percent of 213 ECCE educators were not equipped with knowledge on dental injuries and 23 percent attended training on emergency management (Antunes et al., 2015).

**Table 1:** Literature on the educators' preparedness towards children safety and health

Aspect	Author(s)	Year	Country	Findings
Knowledge	(Sae-Lim & Lim, 2001)	2001	Singapore	Low level of knowledge on dental trauma management
	(Al-Robaiaay, 2013)	2013	Iraq	Low level of knowledge on first aids
	(Bashir & Bakarman, 2014)	2014	Saudi Arabia	Low level of knowledge on first aids
	(Kim & Yu, 2014)	2014	Korea	Moderate level of knowledge on disease infections
	(Antunes, et al., 2015)	2015	Brazil	Low level of knowledge on first aids Low level of dental injury management
	(Wong, et al., 2015)	2015	Hong Kong	High level of knowledge on childhood injuries Low level of knowledge on health and safety measures
	(Kim & Park, 2016)	2016	Korea	Low level of knowledge on infectious disease
	(Offe, 2016)	2016	Ghana	High knowledge of disease infection prevention measures and control
	(Slabe, Dolenc, & Kvas, 2016)	2016	Slovenia	High level of knowledge on health principal Low level of knowledge on first aids
	(Sienkiewicz, et al., 2017)	2017	USA	Low level of dental injury management
	(Ganfure, et al., 2018)	2018	Ethiopia	Low level of knowledge on first aids
	(Liu et al., 2018)	2018	China	Moderate level of knowledge on nutrition
	(Baltacı, Baygın, Tüzmen, & Korkmaz, 2019)	2019	Turkey	Low level of knowledge on dental care
	(Gezmen-Karadağ, Yildiran, Köksal, & Ertaş Öztürk, 2019)	2019	Turkey	Moderate level of knowledge on nutrition



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Practice	(Bashir & Bakarman, 2014)	2014	Saudi Arabia	Low level of first aid practice
	(Baltacı, et al., 2019)	2019	Turkey	Low level of dental check-up practice

Another area which requires further attention is nutrition. Children grow in a safe environment and to have adequate care for their nutrition ultimately leads to them having better opportunities to develop better learning compared to children who suffer from malnutrition. However, only 54.2 percent of ECCE educators in a research conducted in China had basic knowledge about diet and only 9.9 percent felt that they were knowledgeably prepared with childhood nutrition (Liu, et al., 2018). Only 66.2 percent of Turkish teachers aware that their schools practiced balanced diet policy (Gezmen-Karadağ, et al., 2019). Local context has proven that Malaysian females had high awareness of the nutrition label (Ramdan, Zainol, Osman, Abidin, & Yahaya, 2016). Overall, the lack of ECCE educators' preparedness is still a worldwide issue and it impedes correct procedures from being followed and may affect the child negatively.

ECCE educators' realised the existence of explicit policy, procedures, training and occupational safety and health committee. However, more consideration should be looked into in preparing these educators towards a safer and healthier environment for children particularly in terms of educators' demographic and training factors. Educators with higher levels of education compared to those that were younger and coming from rural districts were proven to be achieving higher scores in first aid survey (Liu, et al., 2018). In parallel, educators with 5 years of experience in caring for children in private kindergarten had higher safety and health knowledge because of the training that they attended (Ganfure, et al., 2018). ECCE educators' holding a Bachelor degree or higher qualification tend to emphasise the importance of increasing professionalism in staff than those with a Diploma degree or lower qualifications (Wong, et al., 2015). In a comparison between front-line teachers and senior teachers/principals, the latter were more willing to establish a safety and health guideline and proper documentations for their kindergarten operations (Wong, et al., 2015). Ability to cope with an emergency, knowledge about impaction, poisoning, bleeding, high fever and CPR was also higher in ECCE educators than pre-service ECCE educators (Yuk, Choi, & Yeon, 2017). Also, training should be continuously conducted to refresh educators' knowledge as knowledge tend to diminish as time lapses (Li, Sheng, Zhang, Jiang, & Shen, 2014). The training should also be child developmentally appropriate so that educators could nurture the safety culture among children more successfully (Oh & Kang, 2017).

Knowledge of safety and health is one of the essential aspects to ensure the quality of childcare at preschools and kindergartens. Sound knowledge and practices allow preschools' and kindergartens' educators to prevent child accidents and deaths. Therefore, in Malaysia, to ensure that preschools educators are well prepared to practise safety and health standards, educators are required to complete 144 hours of KAP course and 40 hours of practicals within the first 12 months of their service as stated in the Regulation 54, Preschool Regulation 2012 (*Peraturan 54, Peraturan-Peraturan TASKA 2012*) 2012 (Jabatan Kebajikan Masyarakat, 2018). During the KAP course, exposures are given on different topics of safety and health

practices as outlined in *Permata Curriculum Quality Guideline (Panduan Kualiti Kurikulum Permata Negara)*. The topics include general health, oral health, and safety of children, balanced diet and menu, first aid and accident prevention, and fire prevention (R. A. Jabatan Kebajikan Masyarakat, Aminah Ayob, Jameyah Shariff, Nani Menon, 2013). Surprisingly, children health and safety issues are still occurring in Malaysian preschools and kindergartens. Such unwanted outcomes may have been rooted from the low level of educators' preparedness towards children health and safety issues under their care. This idea is supported by the lack of studies of educators' preparedness in Malaysian context as shown in Table 1. Thus, this research is dedicated to explore Malaysian ECCE educators' preparedness on safety and health of children. The next section will discuss the methodology of this study.

### **Research Objective**

This research is conducted to explore ECCE educators' preparedness in terms of knowledge and skill towards children safety and health issues. To address this objective, a qualitative methodology was employed by interviewing educators from selected registered preschools and kindergartens in Malaysia.

### **Methodology**

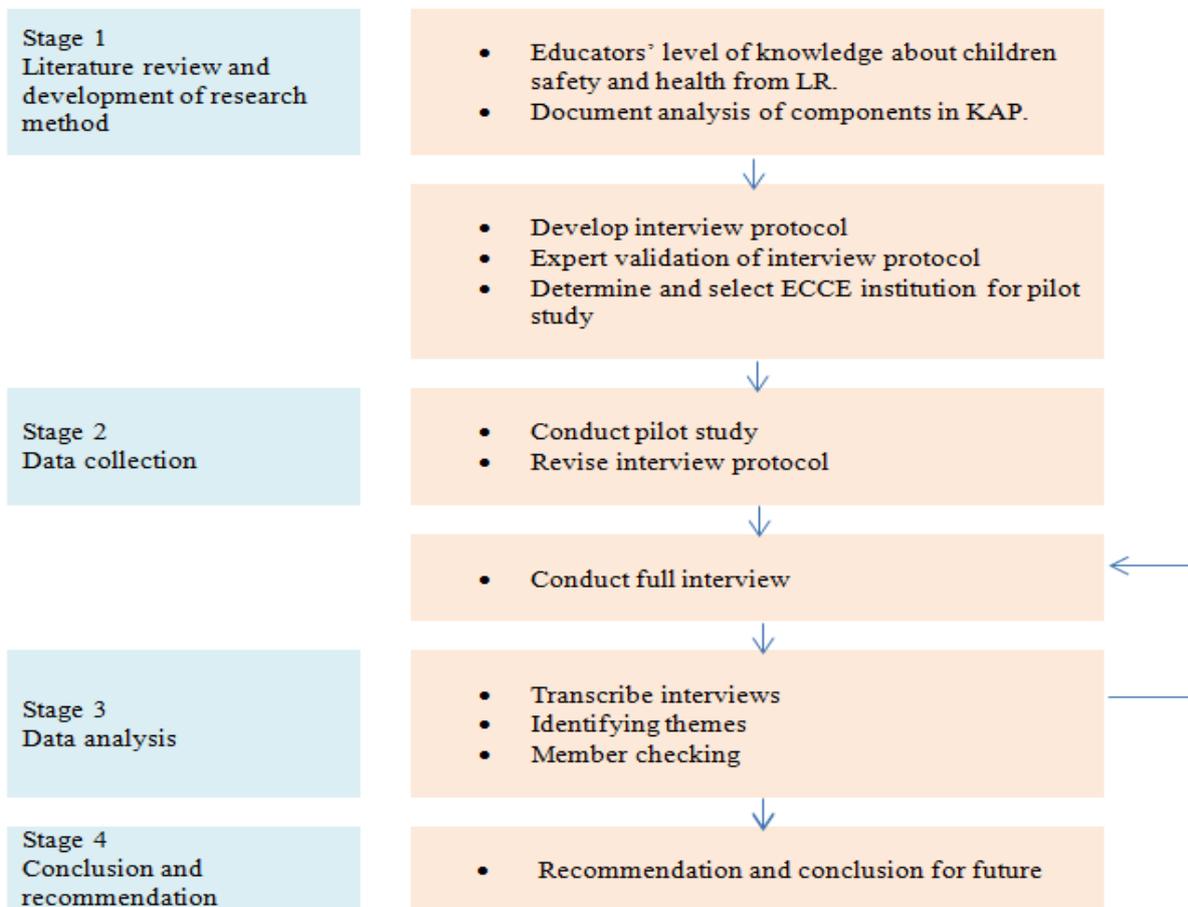
The objective of this study is to explore the ECCE educators' preparedness towards children safety and health. To achieve this objective, this research was undertaken in 4 stages as shown in Figure 1. During the first stage, a thorough review of past works of literature was conducted to understand the existing educators' preparedness about child safety and health. Moreover, the curriculum of KAP was analysed to identify the children safety and health component. Based on the literature and document analysis, an interview protocol was developed and sent for validation by three academic experts and two industry experts.

In stage 2, a pilot study was performed, and revision was made to the interview protocol accordingly before full scale data collection was conducted. Altogether, 13 group interviews were carried out among educators from registered preschools (5-6 years) and kindergarten (0-4 years) before data saturation was reached. This sample size is also aligned with the concept of information power (Malterud, Siersma, & Guassora, 2016). By using purposive sampling technique, the participants were selected according to the criteria below to represent the variation of knowledge across types of people involved in children safety and health at ECCE institutions:

- Educators working in registered ECCE institutions in Malaysia
- Educators possess good communication skill
- Educators are willing to participate in the research

In stage 3, all interview data were transcribed in verbatim so that data could be coded and categorised easily. By using thematic analysis, several themes were identified specifically based on methods for analysing qualitative data recommended by Miles, Huberman and Saldana (2018) and LeCompte(2000). As both academician and industrial experts completed the validation of the results through member checking, a recommendation was proposed based on the research findings.

**Figure 1.** Stages of research methodology



### Analysis and Discussion

Data are analysed to view participants view about their preparedness towards children health and safety. Overall, educators' preparedness can be divided into knowledge and practice. Based on the interviews, ECCE educators received training on safety and health mainly through KAP. First aid training was among the important training received by them. Besides, they also developed a collaboration with the police department for more knowledge. The following excerpt described this information.

*"Okay, sure there is a fire drill course in the Permata course (KAP course). Even while working. The supervisor sent us for fire drill training at the fire station."*

*(TASKA KEMAS Caregiver)*

*And our emergency training as well, like for me we take a course, the first aid course."*

*(TADIKA PAPN Educator)*

*"We have knowledge. OK from there we form our security. What we do, we improve it every year or go to the police station, we see what kind of knowledge that can be given by the police officers so that we have our TASKA protected. Sometimes there is a burglary case too."*

*(PAPN Supervisor )*

In terms of practice, ECCE educators performed appropriate safety and health measures including cleaning routine, picking up procedure, food preparation, health screening and first aid practice. It is a daily routine for educators to ensure the cleanliness and hygiene of the learning environment before the children arrived. The opinion of the participants are as follows:

*"In the morning, we have to do housekeeping and everything, and we all do it as stated in the KAP. I also have to teach so there is a routine, their timetable, the what to do list. So they (educators) get to work early at 7 o'clock so they usually walk at 7.30, or 8 o'clock like so. So before half an hour, it's a routine for them, spraying Dettol, then sweeping, clean up everything, from front desk to kitchen."*  
*(TASKA/TADIKA KPM Operator)*

*"Cleanliness..hmm.. everytime in the morning the earliest teacher will take care of it. Usually, there are four teachers. Two will welcome the children and conducting physical check up and whatnot. The other two will sweep, clean, mopping. It's a routine and every Thursday we will do the cleaning throughout."*

*(YPKT Supervisor)*

On regards to the sending and picking up procedure, the participants explained that they had strict regulation to ensure children safety. For example, the participants elaborated that:

*"We already notify, if it is late, they (parents) need to inform the teachers why."*



*(YPKT Supervisor)*

*"If someone else wants to take the child, then the parent will call us first. They send us a picture if the aunt wants to pick up."*

*(YPKT Supervisor)*

*"Haa like taska, the door will be locked at half pass nine."*

*(YPKT Supervisor)*

In addition, health care practices are also applied in preschools and kindergartens, for instance, from the aspects of child nutrition, health screening, and dental health care. For example:

*"They will change the menus every year, but they send us the menu recommendations that have been approved by the Ministry of Health at the district level because we have changed the menu every year hmm they referred it to the health (ministry) and they will inform us... "*

*(TASKA JPNIN Supervisor)*

*"I will tell if let say fever, asked to check it first instead of informing it directly to parents. We do not want the parents to come, but the child is not even sick."*

*(TADIKA JKM Operator)*

*"If it's a small wound, we take care of it ourselves first. Then after that, we inform the parents."*

*(TADIKA KPM Educators)*

*"There is. All of the SOPs are practiced in preschool."*

*(IPG Lecturer)*

*"Two (educators) will welcome the children and conducting physical check up and whatnot."*

*(YPKT Supervisor)*

*"In terms of health (we have) dental."*

*(TASKA JPNIN Supervisor)*

In summary, these preliminary findings show that ECCE educators in registered preschools and kindergartens had the necessary knowledge to avoid injuries from occurring. The explanations by multiple participants verified that the knowledge that they gain from KAP course was practiced in the preschools and kindergartens to ensure children safety and health well taken care of. Table 2 summarised the findings of this study.

**Table 2:** Summary of thematic analysis results

<b>Theme</b>	<b>Sub-theme</b>
Knowledge	KAP course
	First aid
Practice	Cleaning routine
	Sending and picking up procedure
	Food preparation
	Health screening
	First aid

Our study focused on educators from the registered preschools and kindergartens, where they are bound to rules and regulations related to child safety and health. Based on our findings, these educators know about child safety and health and received related training from ECCE agencies such as KAP course by Permata which covers 144 hours of learning and 40 hours of practice (29 days full-time). The enforcement of KAP course is not only limited to educators but widely covers all preschools and kindergartens staff that includes employers, managers, supervisors and carers. This course must be attended and passed within twelve working months according to Regulation 54 of the TASKA Regulations 2012. Since this course focused on numbers of aspects including health care, early health screening, hygiene practices (children and types of equipment), and safety (children, types of equipment, premise) therefore the educators should have sufficient understanding on safety and health.

In addition to that, these registered preschools have fulfilled the requirements on the environment and infrastructure set out by the technical agency such as Ministry of Housing and Local Government, Fire and Rescue Department, and Health Department (Jabatan Kebajikan Masyarakat, 2018). The aspects that are being evaluated are infrastructural conditions of the premise, location, educator-children ratio, emergency procedures, food preparation and delivery, educators' training on safety and emergency, management and maintenance of infrastructure.



To ensure that educators practice the knowledge they received during course and training on safety and health, the preschools and kindergartens are being monitored occasionally by the Ministry of Health Malaysia at least once a year (Kementerian Kesihatan Malaysia, 2012). The monitoring includes the safety of pieces of equipment and premise, as well as preparedness for emergencies (Kementerian Kesihatan Malaysia, 2012). For these reasons, this study found corroboration with earlier research which practices similar health and safety procedures (Konakli & Ülçetin, 2016).

## **Conclusion**

There is evidence that educators in registered preschools and kindergartens are well prepared in terms of safety and health knowledge and practice. The injury and mortality cases reported in the news mainly came from unregistered preschools and kindergartens. Therefore, there is a necessity for ECCE agencies to make sure all preschools and kindergartens are registered so that their educators received proper training on safety and health. In addition to that, there should be enforcement for more frequent monitoring of appropriate safety and health practices are conducted at registered preschools and kindergartens. Nevertheless, aspects such as mental health and cyber safety are yet to be discovered in this research, implying that educators need more exposure in this area.

## **Limitation and Study Forward**

Despite the evidence found about safety and health preparedness of kindergartens' and preschools' educators in Malaysia, this study has been conducted among registered institutions only. It means that unregistered kindergartens and preschools which do not have monitoring from the authority were not included in this study. Therefore, the findings which imply well preparation of educators towards safety and health in early childhood settings cannot be generalised to unregistered institutions. In addition, this study relied on interview data from various participants to develop the themes of finding. Observation on the premises was not conducted. For that reason, the findings from this study are subject to the participants' self-declared perception regarding their safety and health preparedness. For future studies, researchers are suggested to include unregistered kindergartens and preschools in their research samples and perform thorough observations to validate the research findings.

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Childhood Care and Education (ECCE) which comprises four projects namely; Project 1: Evaluation of Existing ECCE Programs to Improve Quality That Inform Policy, Project 2: Development of Carers-Educators' Professionalism, Project 3: Determining Contributing Factors of Quality ECCE and Project 4: Impact of ECCE on Human Capital Development. We thank all members of the research team who have contributed to this research. We also thank the steering committee, critical informants, parents and other stakeholders who participated in the study.



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