



# DEVELOPMENT OF IIUM KNOWLEDGE AND PRACTICES ON CHILDREN EYE CARE QUESTIONNAIRE (IIUM KPC-EYE Q).



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## ABSTRACT

In Malaysia, the main causes of visual impairment in children is uncorrected refractive error, which is treatable and preventable. Previous studies reported that, most parents did not bother to bring their children for eye examination and they believed that routine eye exam is not necessary. It is important to identify the reasons why some parents seek care for their children and others do not. The purpose of this study is to develop a reliable and validated questionnaire that measures the parents' knowledge and practices on children eye care in Malaysia, namely the IIUM Knowledge and Practices on Children Eye Care Questionnaire (IIUM KPC-EYE Q). Hopefully more information can be obtained regarding the role of perceptions, practices, and awareness in paediatric eye health among parents. The questionnaire is developed based on extensive literature review and it is a semi-structured question consisting of 3 sections. Subsequently, face and content validity were obtained from the experts. A pilot study was then conducted to investigate its reliability (n=100). Internal consistency reliability was determined for knowledge and practice items of the questionnaire; Cronbach Alpha's value is 0.7 and 0.8 respectively. This indicates good reliability of both instruments, and 75% of the respondents agreed the questionnaire are clear and easy to understand. The study is currently in phase 1 (IIUM KPC-EYE Q) out of 3 phases. It is a potentially useful tool in assessing parental knowledge and practices on children eye care among Malaysian parents.

## Introduction

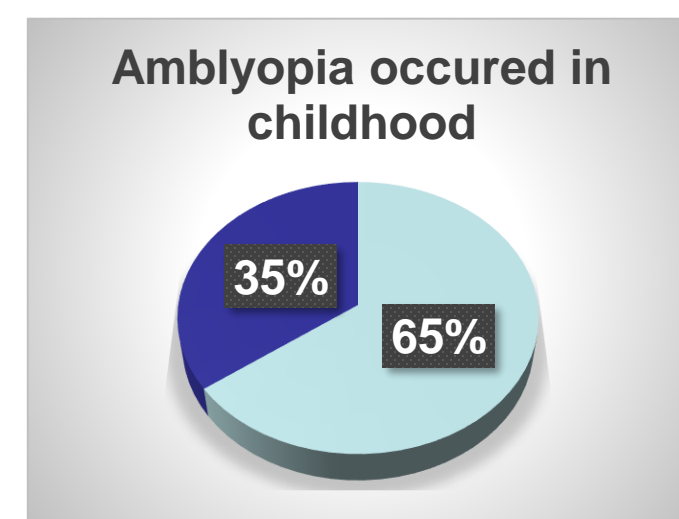
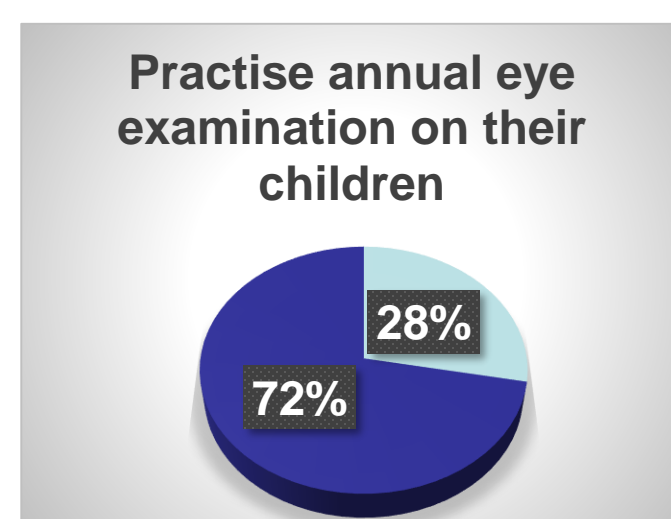
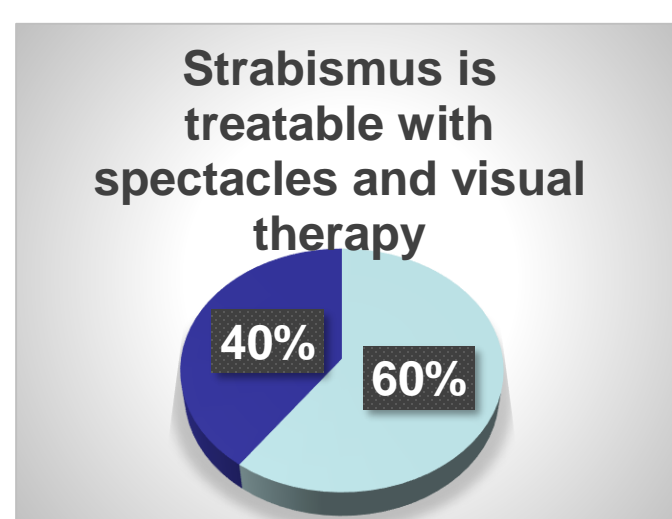
Globally, uncorrected refractive error is the leading cause of moderate to severe vision impairment (Bourne et al., 2017). A similar pattern is also apparent in Malaysia, where a high prevalence of visual impairment in children is due to uncorrected refractive error (Omar, Abdul & Knight, 2019; Knight et al., 2018; Premseenthil et al., 2013; Hashim et al., 2008). Visual impairment can be avoided by preventive measures; early eye examination and treatment (Gillbert & Foster, 2001; Webber, 2007). Patel et al., (2011) in their study in Malaysia reported that 50.5% of visual impairment in children was avoidable; 7.6% was potentially preventable and 42.9% was potentially treatable. One of the causative factors for visual impairment in children was due to parents overlooking the importance of eye health care (Frazier & Kleinstein, 2009); parents did not bother to bring their children for eye examination (Abdulrahman Saeed Baasha et al., 2020; Sukati Moodley & Mashige, 2018) and parents believed that routine eye examination for children is not necessary (Amiebenomo, Achugwo & Abah, 2016). This indicates that the perception and awareness of parents are essential in order to identify the reasons why some parents seek care for their children while others do not (Hugenholtz, Bröer, & Daalen, 2009). However, the description of knowledge and practices on children's eye care among parents is not clearly articulated in Malaysia. Thus, this study aims to develop a questionnaire that measures the knowledge and practices on children's eye care among Malaysian parents.

## Methods

The IIUM KPC-EYE Q is developed based on literature reading. The semi-structured questionnaire consisted of three sections; (a) general and demographics questions, (b) knowledge about children eye care and (c) practice about children eye care. Face and content validation are evaluated by the experts. Subsequently, pilot study was conducted on 100 parents around Kuantan, Pahang. Cronbach Alpha's value was calculated to determine its internal reliability.

## Results

Cronbach's alpha reliability coefficient for 13 items in knowledge scale and 5 items in practice scale is 0.7 and 0.8 respectively. This indicates good reliability on both instruments. Some of the preliminary results as below.



## Conclusions

Some of the parents are still unsure that strabismus can be treated with spectacles and visual therapy (40%), less aware that amblyopia occurred in childhood (35%). About 72% of the parent did not practise yearly comprehensive eye examination on their children. Thus, the IIUM KPC-EYE Q potentially beneficial tools in order to gather information regarding eye awareness and the importance of children eye examination. Perhaps, eye health awareness programme among children should be intensified.

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