

Level of awareness of parents towards pediatric lumbar punctures in Riyadh, Saudi Arabia

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Background: Despite Lumbar Punctures (LPs) known to be a safe procedure in experts' hands, many parents fear performing it on their children; thus, refusing consent. The factors behind refusal of the parents are unclear. This study aimed to explore and assess the level of knowledge of parents towards LPs who live in Riyadh, Saudi Arabia.

Methods: This is a cross-sectional quantitative study that included a sample of parents residing in Riyadh. The study was conducted using an online self-administered questionnaire that was distributed through social media during November 2019 to December 2019. The questionnaire sought parent's demographic data and questions which were divided into three main aspects, i.e. knowledge, perception, and attitude towards LP. Moreover, it was pretested and validated (Cronbach Alpha test = 0.718). The data was analyzed and compared using Chi-square test.

Results: There were 1276 participants (parents, mothers and fathers, not less than 18 years of age, and residing in Riyadh). Among them, (n= 1012 ,79.3%) were mothers and (n=264, 20.7%) were fathers. The study participants varied in their level of education; starting from high school all the way up to post-doctoral degrees (Ph.D). The larger part of the population, (n= 838, 65.7%), obtained a bachelor's degree. More than half of the sample size had a poor perception and knowledge on LP; (n=716, 56.1%) and (n=652, 51.1%) respectively. However, (n= 898, 70.4%) had a positive attitude toward LP. In addition, there was a significant association between knowledge of LP and education level with a p-value <0.001, between perception and educational level p-value <0.001.

Conclusion: Through our examination of the research, we conclude that there is a direct association between a parent's knowledge of LPs, perception of LPs, and their level of education. The less they know about LPs, the more negative they perceive the procedure. Gender and level of education are two factors affecting the outcome. Therefore, it is essential to aim future researches and campaigns toward correcting the societal image of lumbar punctures.