



An Observational Study to Find Out the Available Pediatric Radiology Apps for Smart Phones.

KEYWORDS

Pediatric Radiology, Apps, Smart phone

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ABSTRACT

The observational study was conducted to find out the available Pediatric Radiology Apps for the Smart phones. Both Apple & Google play stores were searched using predefined search key phrases Pediatric Radiology, Pediatric Ultrasonography, Pediatric CT scan, Pediatric MRI, Pediatric MRS and Pediatric X-rays for Apps. The Apps were analyzed for the availability, relevance, cost, rating & the developer. Total availability of four apps on each store, reflected severe paucity and thus indicated necessity of rapid strides in this domain in near future.

Introduction:

There is rapid technological advancement and professional interest in the Smart phone based Apps in the field of Medicine.^{1,2,3,4,5} Some of the branches of medicine are adequately & progressively focused by the Apps. Pediatric Radiology is a very specialized field handling the delicate children and neonates. It is felt important to evaluate that how well is this subspecialty been addressed by the development of Apps. Therefore, the present observational study is designed to address the research question of the current status of Apps in Pediatric Radiology and possibly thus could act as a guide for future development of the needed apps in the subspecialty.

Aim:

An observational study to find out the available Pediatric Radiology Apps for Smart Phones on Apple Store & Google play station for IOS and Android platforms respectively.

Material & Methods:

The apps were searched by using key phrases Pediatric Radiology, Pediatric Ultrasonography, Pediatric CT scan, Pediatric MRI, Pediatric MRS and Pediatric X-rays. Search included both the Apple store and Google play store for IOS & Android platforms respectively, of smartphones. Apps were analyzed about their cost whether free or paid and for their allotted ratings. The data was tabulated & analyzed for possible scope of utility.

Observations:

The Apps detailed observed data is depicted on Table no. 1 and 2 for Apple store and Google play stores respectively.

Discussion:

The study revealed that the total number of Apps on search of apple store with identified search key phrases were much less but retrieved four relevant apps on Pediatric Radiology, while search of Google play store with same search key phrases revealed much larger numbers of Apps at the initial search but only four apps were relevant and specific to the subject. Relevant Apps on both the stores were free and also paid. Apps were costing with in Rs 1230/-. Apps were covering imaging training, MRI protocols, Journal and MCQ. The Apps on apple store did not have enough scoring reviews while on Google play store, three Apps scored between 3 to 4.3, signifying that users

have considered them useful. The Apps developer on both the stores of the specific apps were both medical and non-medical professionals. Based upon available data the need for creation of more specific apps in the domains of Paediatric Radiology becomes more urgent.

Conclusions:

This observational study found out the available Apps of Pediatric Radiology for Smart phones on both Apple and Google play stores. The number of apps available are too few for such a specialized field of Pediatric Radiology. It is thus imperative that more Apps are developed in near future addressing various domains of this subspecialty.

Table 1: Pediatric Radiology Apps on Apple store

Key Phrase	No. of Apps	Pediatric Apps (specific)	Cost	Details	Ratings	Developer
Pediatric Radiology	6	Pediatric Radiology Flash card	Rs 250/-	Training Comprehensive	Nil	Hawki Inc
		Pediatric XR	Free	Training X-ray	Not enough	Ensar Yekelar
		Pediatric Imaging case review	Rs 1200/-	Training Comprehensive	Not enough	Elsevier Inc.
Pediatric Ultrasonography	Nil					
Pediatric CT Scan	Nil					
Pediatric MRI	2	Peds MRI	Free	MRI protocols	Not enough	The Hospital for Sick Children
Pediatric MRS	Nil					
Pediatric Xrays	1	Nil				

Table 2: Pediatric Radiology Apps on Google Play store

Key Phrase	No. of Apps	Pedi- atric Apps (spe- cific)	Cost	De- tails	Ratings	Devel- oper
Pedi- atric Radiol- ogy	127	Pedi- atric Radiol- ogy	Free	Jour- nal	4.3	Springer
		Pediat- ric Ra- diology Review	Rs 1230	MCQ	3	Knowl- edge Testing Inc
Pedi- atric Ultra- sonog- raphy	36	Pedi- atric Ultra- sound	Rs 109	Train- ing	3	Ultra- sound- paedia
Pediat- ric CT Scan	6	Nil				
Pediat- ric MRI	10	Peds MRI	Free	MRI proto- cols	Not enough	The Hospital for Sick Children
Pediat- ric MRS	36	Nil				
Pediat- ric Xrays	85	Pedi- atric Radiol- ogy	Free	Jour- nal	4.3	Springer
		Pediat- ric Ra- diology Review	Rs 1230	MCQs	3	Knowl- edge Testing Inc.

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