



An Observational Study to Find out The Published Research in the Pubmed on the Medical Apps in Smartphones Amongst Various Specialties & Subspecialties in The Domain of Medicine

KEYWORDS

Medical Apps, Smartphone, Pubmed

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ABSTRACT The observational study was conducted to find out the published literature on the Medical apps amongst various Specialties & Subspecialties in the domain of Medicine in the Pubmed database as on 31st Mar 2016. Total of 448 publications were retrieved with search words of Apps and smartphones in Pubmed database. Data retrieved of 20 basic specialties & 22 subspecialties. Amongst basic specialties, only 5 of them have publications numbering more than 10 (Range 11-196). Medicine had highest number of publications being 196 followed by Surgery. While in subspecialties and allied only 3 have more than 10 (range 14-75) publications with Medical Informatics having 75 followed by Nutrition & Oncology. Biochemistry, Forensic Medicine, Neonatology, Gastrointestinal surgery & Onco-surgery have unique distinction with nil publication. This study revealed the comprehensive use of apps in all domains of Medicine. 80% of analyzed specialties & subspecialties have less than 10 publications. Therefore, study indicates that there is need to have more use & publications on apps by most of the subjects of medicine.

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} Now, the scientific world has started gaining experience on the use of Medical apps in Smartphones & has started the next phase of collating data & publishing. The relative contribution of publication of the research on this subject of use of apps amongst various Specialties & Subspecialties in the domain of Medicine has not being so far analyzed. This study is designed to answer the same research question.

Aim

An observational study to find out the published research in the Pubmed on the Medical apps in Smartphones amongst various Specialties & Subspecialties in the domain of Medicine.

Material & Methods

The Pubmed search was conducted using key phrases Apps, Smartphones, subject names of various specialties & subspecialties as on 31st Mar 2016. The data was collated and analyzed.

Observations

The detailed data on Apps on Smartphones on Pubmed search is depicted in Table no. 1 & 2 for specialties & Table 3 & 4 for subspecialties.

Discussion

The study revealed that the total number of publications on the subject being 448. Data retrieved of 20 basic specialties & 22 subspecialties. Amongst basic specialties, only 5 of them have publications numbering more than 10 (Range 11-196). Medicine had highest number of publications being 196 followed by Surgery, Psychiatry, Physiology & Community Medicine. While in subspecialties and allied only 3 have more than 10 (range 14-75) publications with Medical Informatics having 75 followed by Nutrition & Oncology. Biochemistry, Forensic Medicine, Neonatology, Gastrointestinal surgery & Onco-surgery have unique distinction with nil publication. This study revealed the comprehensive use of apps in all domains of Medicine. 80%

of analyzed specialties & subspecialties have less than 10 publications. Therefore, the study indicates that there is need to have more use & publications on apps by most of the subjects of medicine.

Conclusions

This observational study extracted the number of publications from the Pubmed database on the use of Medical apps in Smartphones amongst various Specialties & Subspecialties in the domain of Medicine. It revealed that the various Specialties & Subspecialties are using apps & publishing. There is significant lack of publication on use of apps in most of the subjects of Medical domain, which needs to get attention of medical fraternity for better management at point of care.

Table 1: Specialty-wise Publications

S.N	Specialty	Number of Apps
1	Anatomy	4
2	Physiology	21
3	Biochemistry	0
4	Microbiology	3
5	Pathology	5
6	Pharmacology	10
7	Forensic Medicine	0
8	Medicine	196
9	Pediatrics	4
10	Psychiatry	25
11	Dermatology	6
12	Community Medicine	11
13	Ophthalmology	5
14	ENT	1
15	Anesthesia	3
16	Surgery	41
17	Obstetrics & Gynecology	1
18	Orthopedics	9
19	Radiology	5
20	Hospital Admin	10

Table 2: Stratification of Specialties based on Number of Publications

S.N	Class interval of Publications	Number of specialties
1	>10	5
2	6-10	4
3	0-5	11

Table 3: Subspecialty-wise Publications

S.N	Subspecialty	Number of Apps
1	Neonatology	0
2	Neurology	5
3	Cardiology	5
4	Pulmonology	1
5	Gastroenterology	3
6	Hematology	1
7	Oncology	14
8	Immunology	1
9	Genetics	1
10	Infectious Disease	9
11	Clinical epidemiology	8
12	Medical Biostatistics	3
13	Nutrition	25
14	Cardiothoracic surgery	2
15	Gastrointestinal surgery	0
16	Urology	5
17	Onco-surgery	0
18	Neurosurgery	2
19	Reconstructive surgery	3
20	Medical Informatics	75
21	Endocrinology	4
22	Yoga	1

Table 4: Stratification of Subspecialties based on Number of Publications

S.N	Class interval of Publications	Number of Subspecialties
1	>10	3
2	6-10	2
3	0-5	17

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