# To Determine the Knowledge and Practice Regarding Health App' among Student Nurses, Posted at Kashiben Children Hospital, Vadodara

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## ABSTRACT

**BACKGROUND**: Health apps are those application programs which offer health-related services in terms of diagnosis, treatment, prevention, awareness, dosage etc. for smart phones, tablets and computers, Because they're accessible to medical and paramedical personnel, patients both at home and on-the-go, health apps are a part of the movement towards mobile health (mHealth) programs in health care. There are many varieties of health apps available from app stores. Some are designed to help consumers, medical personnel to make healthier choices in their everyday life by offering, consuming advice about fitness or nutrition. But still there is not that much awareness among the people about this easy step for initial assessment at their door place. So with this new innovation researchers wanted to conduct this study. **AIMS AND OBJECTIVES**: the aim of this study is to assess the knowledge and practice regarding health app' among student nurses posted at kashiben children hospital, vadodara. **MATERIAL AND METHOD:** Descriptive design was adopted with quantitative approach. 100 student nurses posted at kashiben children hospital, Vadodara were selected as sample by convenience sampling technique.The tool consists of three parts. First part consist demographic data of the sample, second part consist of Self Structural Dichotomous questionnaire for knowledge and practice regarding health app' **RESULTS**: The collected data was tabulated and analyzed using descriptive and inferential statistics. Knowledge Results shows that 7 student nurse (7%) have poor knowledge, 59 student nurse (59%) have average knowledge, 34 student nurse (34%) have good knowledge regarding health applications, where as practice result presents that 18 student nurse (18%) have poor practice, 60 student nurse (60%) have average practice, 22 student nurse (22%) have good practice regarding health applications. Researcher have also found that there is a significant association between Knowledge score and demographic variables such as living area of student nurse, and type of mobile that they are using, at 0.05 level of significance . To find the significant correlation between knowledge and practice score of health application among student nurses karlpearson formula is used The Karl Pearson correlation coefficient score was r= 0.42, which proves that there is a positive significant correlation between knowledge and practice score. **CONCLUSION:** Majority 59 student nurse (59%) have average knowledge and 60 student nurse (60%) have average practice regarding health app'. Hence it indicated that there is a positive correlation between knowledge and practice score.

## KEYWORDS

*Knowledge, Practice, Health app', Nursing Students*

## INTRODUCTION

A mobile app is a computer program designed to run on a mobile device such as a phone/tablet or watch. The term "app" is a shortening of the term "software application". It has become very popular, and in 2010 Most such devices are sold with several apps bundled as pre-installed software, such as a web browser, email client, calendar, mapping program, and an app for buying music or other media and Even health app'[1]. Health apps are application programs that offer health-related services for smart phones and tablets. Because they're accessible to patients both at home and on-the-go, health apps are a part of the movement towards mobile health (mHealth) programs in health care[2]. There are many varieties of health apps available for purchase from

app stores. Some are designed to help consumers make healthier choices in their everyday life by offering advice about fitness or nutrition. Others help doctors and patients communicate from afar, like apps for diabetics that automatically sent glucose readings to their primary care physicians. Some apps are aimed at physicians themselves—many apps combine mHealth with electronic medical records (EMR), allowing doctors to keep accurate records that are easily accessible [3]. In India total 73 types of health app' are authenticated by national health Portal such as MEDBOX, 1mg, Health care at home , 5 minute consult, up to date, new born care etc. But still there is not that much awareness among the people about this easy step for initial assessment at their door place. So with this new innovation researchers wanted to assess the knowledge and practice regarding Health app among student nurses[4].

## MATERIALS AND METHODS

### OBJECTIVES OF THE STUDY

1. Assess the knowledge regarding health application among the Student Nurses posted at kashiben children Hospital, Vadodara

2. Assess the practice regarding health application among the Student Nurses posted at Kashiben Children Hospital, Vadodara

3. Find out the association between knowledge regarding health application with demographic variables of Student Nurse.

4. Determine the correlation between knowledge and practice regarding health application among the Student Nurses posted at Kashiben Children Hospital, Vadodara

### HYPOTHESIS

**H1**: There will be significant correlation between knowledge score and practice score regarding health app' among student nurses posted at kashiben children hospital at 0.05 level of significance.

### ASSUMPTION

- Student nurses may have average knowledge regarding health app'.

- Student nurses may have average Practice regarding health app'.

### VARIABLES

Variable are qualities and quantities, properties, or characteristic of people things or situation that change

- **Dependent variable:** Knowledge and practice regarding health app'

- **Demographic variable:** Age, Gender, Living Area, Type of phone of Student Nurse

**RESEARCH DESIGN:** Descriptive design was adopted to achieve the goal of the study.

**SAMPLE SIZE:** 100 samples

**SAMPLE:** 100 student nurses posted at Kashiben Children Hospital, Vadodara were selected as sample by convenience sampling technique

**SAMPLING TECHNIQUE**: convenience sampling technique

**THE TOOLS USED IN COLLECTION OF DATA**: The tool consists of 3 parts: First part consists demographic data of the sample second part consists of 10 dichotomous type of questionnaire representing knowledge and third part consists of 10 dichotomous type of questionnaire representing Practice area.

**Scoring for the tool: Absolute grading is used.**

Poor knowledge: 0-3 marks

Poor Practice: 0-3 marks

Average knowledge: 4-7 marks

Average Practice: 4-7 marks

Good knowledge: 8-10 marks

Good Practice: 8-10 marks

## RESULTS

The collected data were edited, tabulated, analyzed, interpreted and findings were presented in the form of tables and diagrams represent under the following areas.

**Section I:** Frequency and percentage Distribution of demographic variables of student Nurse

**Section II:** assessment of knowledge and practice regarding health app' among student nurses

**Section III:** Determine the correlation between knowledge score and practice score regarding health app'

**Section IV:** Find out the association between knowledge regarding health application with demographic variables of Student Nurse

**SECTION I**

**Table 1** Frequency and percentage Distribution of demographic variables of Student Nurse

| S.No. | Variables | | Frequency | Percentage |
|---|---|---|---|---|
| 1 | **Age of Student Nurse** | | | |
| | A) | 17-20 Years | 48 | 48% |
| | B) | 21-24 Years | 45 | 45% |
| | C) | ≥25 Years | 7 | 7% |
| 2 | **Gender** | | | |
| | A) | Male | 12 | 12% |
| | B) | Female | 88 | 88% |
| 3 | **Living Area** | | | |
| | A) | Urban | 59 | 59% |
| | B) | Rural | 41 | 41% |
| 4 | **Type of phone** | | | |
| | A) | Smart Phone | 81 | 81% |
| | B) | Simple Phone | 19 | 19% |
| | C) | Don't Use Phone | 0 | 0 |

**Inference:** Above table 1 presents that maximum 48 student nurse (48%) have age of17-20,maximum 88 student nurses (88%) are female, 59 student nurse (59%) are living in urban area and 81 Student nurses (81%) use smart phone

## SECTION II
## ASSESSMENT OF KNOWLEDGE REGARDING HEALTH APPLICATION

This section deals with the analysis of the knowledge of health application among Student nurse

**Table 2** Knowledge score regarding health application among student nurse

### KNOWLEDGE SCORE

|  | FREQUENCY | PERCENTAGE |
|---|---|---|
| Poor Knowledge (0-3) | 7 | 7% |
| Average Knowledge (4-7) | 59 | 59% |
| Good Knowledge (8-10) | 34 | 34% |

**Inference**: Above table 2 presents that 7 student nurses (7%) have poor knowledge regarding health application, 59 student nurse (59%) have average knowledge regarding health application, 34 student nurse (34%) have good knowledge regarding health application.



**Fig 1** Column diagram depicting knowledge score regarding health application among student nurse

**Inference**: Above Fig 1 presents that 7 student nurse (7%) have poor knowledge regarding health application, 59 student nurse (59%) have average knowledge regarding health application, 34 student nurse (34%) have good knowledge regarding health application
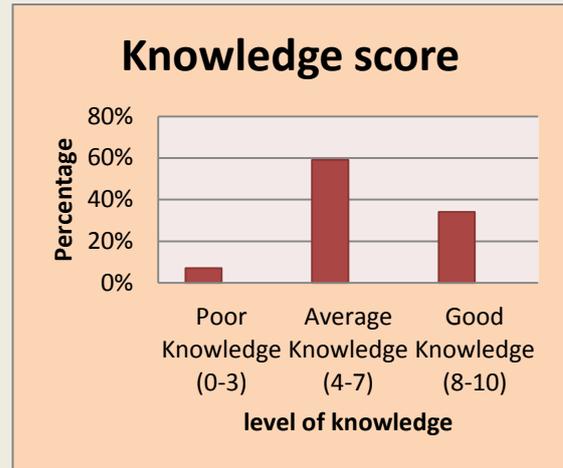
**TABLE 3** Practice score regarding health application among student nurse

### PRACTICE SCORE

|  | FREQUENCY | PERCENTAGE |
|---|---|---|
| **Poor Practice (0-3)** | **18** | **18%** |
| **Average Practice (4-7)** | **60** | **60%** |
| Good Practice (8-10) | 22 | 22% |

**Inference:** Above table 3 presents that 18 student nurse (18%) have poor practice regarding health application, 60 student nurse (60%) have average practice regarding health application, 22 student nurse (22%) have good practice regarding health application,

**Fig 2** Column diagram depicting Practice score regarding health application among student nurse



**Fig 3** Column diagram depicting Mean Knowledge and Practice score regarding health application among student nurse
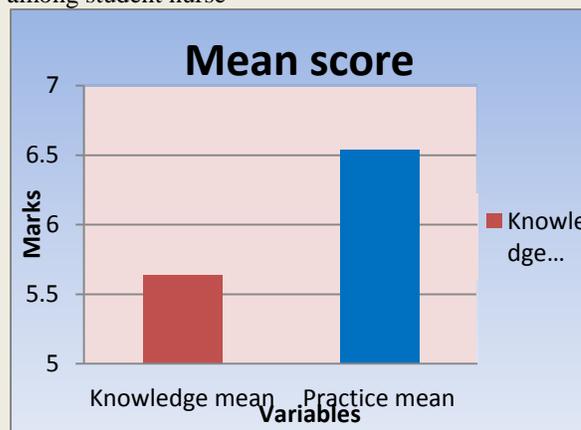


**Inference:** Above Fig 2 presents that 18 student nurse (18%) have poor practice regarding health application, 60 student nurse (60%) have average practice regarding health application, 22 student nurse (22%) have good practice regarding health application,

**SECTION III:**

**CORELATION BETWEEN KNOWLEDGE SCORE AND PRACTICE SCORE OF HEALTH APPLICATION**

To find the significant correlation between knowledge and practice score of health application among student nurses karlpearson formula is used. In this study, The Karl Pearson correlation coefficient score was r= 0.42,which proves that there is a positive significant correlation between knowledge and practice score. Thus the hypothesis H1 is accepted.

**Inference**: Above mentioned Fig 3 shows that knowledge mean score is 5.7 and practice mean score is 6.5

**SECTION IV**

**ASSOCIATION BETWEEN KNOWLEDGE SCORE WITH DEMOGRAPHIC VARIABLES**

This section deals with the association between knowledge score with demographic variables of student nurse. chi-square was used to determine the association between knowledge score with demographic variables of student nurse.

**Formula Used for Association =**

$$\chi^2 = \quad (O-E)^2 / E$$

**KEY:**

O = Observed frequency

E = Expected frequency

E = Row Total X Column Total

Total frequency

**Table 4** Association of knowledge score and demographic variable regarding health application among student nurse

| | Variables | Scores which falls at Median and Above | Scores which falls below the Median | Total | $x^2$ | df | Level of significance |
|---|---|---|---|---|---|---|---|
| 1 | **AGE OF STUDENT** | | | | | | |
| | A) 17-20 years | 20 | 28 | **48** | | | |
| | B) 21- 24 years | 15 | 30 | **45** | 3.76 | 2 | NS |
| | C) ≥25 years | 5 | 2 | **7** | | | |
| | **Total** | **40** | **60** | **100** | | | |
| 2 | **GENDER** | | | | | | |
| | A)Male | 3 | 9 | **12** | | | |
| | B) Female | 37 | 51 | **88** | | | |
| | | | | | 1.24 | 1 | NS |
| | Total | **40** | **60** | **100** | | | |
| 3 | **LIVING AREA** | | | | | | |
| | A) Urban | 20 | 44 | **64** | | | |
| | B) Rural | 20 | 16 | **36** | | | |
| | | | | | 5.67 | 1 | S |
| | Total | **40** | **60** | **30** | | | |
| 4 | **TYPE OF PHONE** | | | | | | |
| | A)Smart phone | 24 | 57 | 81 | | | |
| | B) Simple Phone | 16 | 3 | 19 | | | S |
| | C) Don't Use | 40 | 0 | 0 | | | |
| | Total | **40** | **60** | **30** | 19.1 | 2 | |

**INFERENCE**: Above mention table 4 shows that the obtained X2 value in age, Gender are less than the table value of X2 at 0.05 level of significance. Hence the obtained X2 value is non significant, and the Living area and Types of phone variables obtained x2 value is more than the table value at 0.05 level of significant. Hence there is significant association between those selected demographic

variables and Knowledge of student nurse regarding health app'.

## CONCLUSION

Knowledge Results shows that 7 student nurse (7%) have poor knowledge, 59 student nurse (59%) have average knowledge, 34 student nurse (34%) have good knowledge regarding health applications, where as practice result presents that 18 student nurse (18%) have poor practice, 60 student nurse (60%) have average practice, 22 student nurse (22%) have good practice regarding health applications. To find the significant correlation between knowledge and practice score of health application among student nurses karl pearson formula is used. In this study, The Karl Pearson correlation coefficient score was r= 0.42, which proves that there is a positive significant correlation between knowledge and practice score. Researcher have also found that there is a significant association between Knowledge score and demographic variables such as living area of student nurse, and type of mobile that they are using, and there is not significant association between knowledge score and demographic variables such as Age and Gender of student nurses at 0.05 level of significance .

## IMPLICATIONS

The investigator has drawn the following implications from the studies which are vital concern to the field of nursing practice, nursing education, nursing administration and nursing research.

## RECOMMENDATIONS

In the light of the above findings and personal experience of the investigator the following recommendations are offered: The study can be replicated on a larger sample; thereby findings can be generalized for a larger population. A similar study can be conducted for comparison between Medical Students and paramedical students

## LIMITATIONS

• This study is not generalized as there is no randomization

• This study is limited to the those student nurses who were posted at Kashiben children hospital vadodara at the time of data collection

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