An Evaluation of the Usability of Accessing MEDLINE over Short Messaging System

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Abstract

- Short messaging system is one of the most popular messaging protocols especially in developing countries
- MEDLINE is a resource that provides health workers access to peer reviewed articles that can help in the care of patients

Introduction

- The Philippines is the texting capital of the world
- One billion SMS messgaes pass through its three cellular networks
- Cellphones and SMS is a convenient, portable protocol for accessing information
- Can MEDLINE be delivered effectively to cellphones over SMS?

Methods

- Fontelo et al created a special portal to MEDLINE which delivers The Bottom Line (TBL) in text-speak
- Examples of text-speak
  - preprtv --> pre-operative
  - muscl --> muscle
  - intensv --> intensive
- A pilot (first phase) was done which was followed by the formal second phase of the study.

Results

Categories of Queries	Evaluation Scores				
	1	2	3	4	5
Diagnosis	10	2	1	1	1
Etiology	7	0	1	0	0
Prognosis	1	1	0	1	0
Treatment	139	19	17	21	13
Prevention	0	0	0	0	0

Table 3-1: Summary of evaluation scores according to category during the second phase

- Most of the queries were for treatment options.

Results

Comments:	Hits:
More relevant journals	19
Delays in delivery	15
Responses not matched/unrelated to query	13
No available literature	13
Limit results within previous query	6
Abbreviations cannot be understood/too ambiguous	5
Others	4
Total	75

Table 3-2: Summary of comments during the second phase

- Qualitative results of the study.

Conclusions

- SMS most convenient communications protocol.
- SMS limited in display area and limits viewability of result set.
- Participants can understand text-speak.
- Lower costs for online access to MEDLINE (GPRS/3G) makes the limited interface of SMS of txt2MEDLINE a less practical solution to information seeking.

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