A preliminary study to evaluate the use of information and communication technology (ICT) in Sri Lankan primary care practice

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Objectives

1. to examine the current level of ICT usage in primary care practices

2. to investigated the perceptions and expectations of general practitioners in using digital technologies
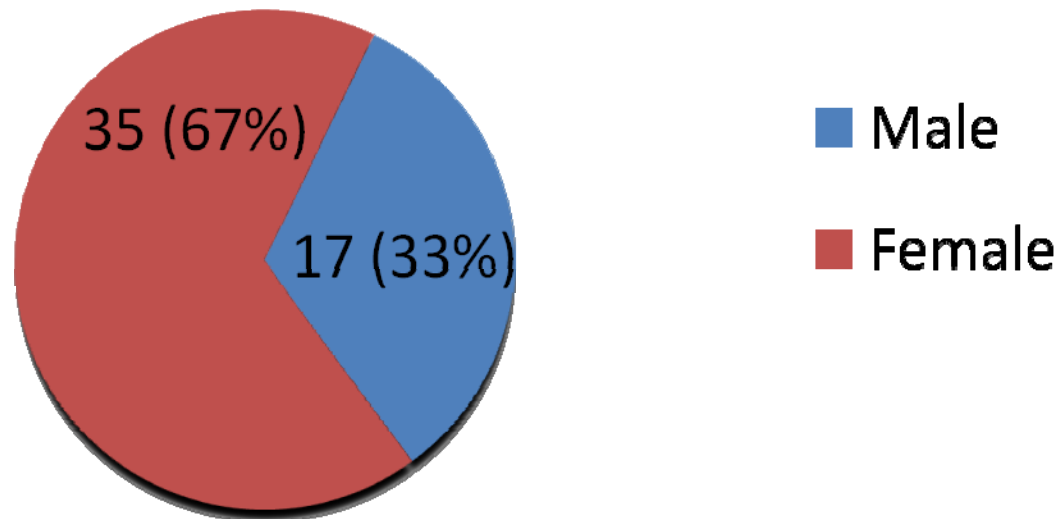
Method

- Sample: all General Practitioners (GP's) in two suburban provinces near capital Colombo – a cluster sample (*n*=70)

- Duration: mid March - end of July (2007)

- Analysis: simple statistical analysis-MS-Excel

- Research tool- a self administered questionnaire (modified)

  - demographic information,

  - current level of ICT use,

  - areas of ICT use,

  - main applications and

  - the perceptions/expectations

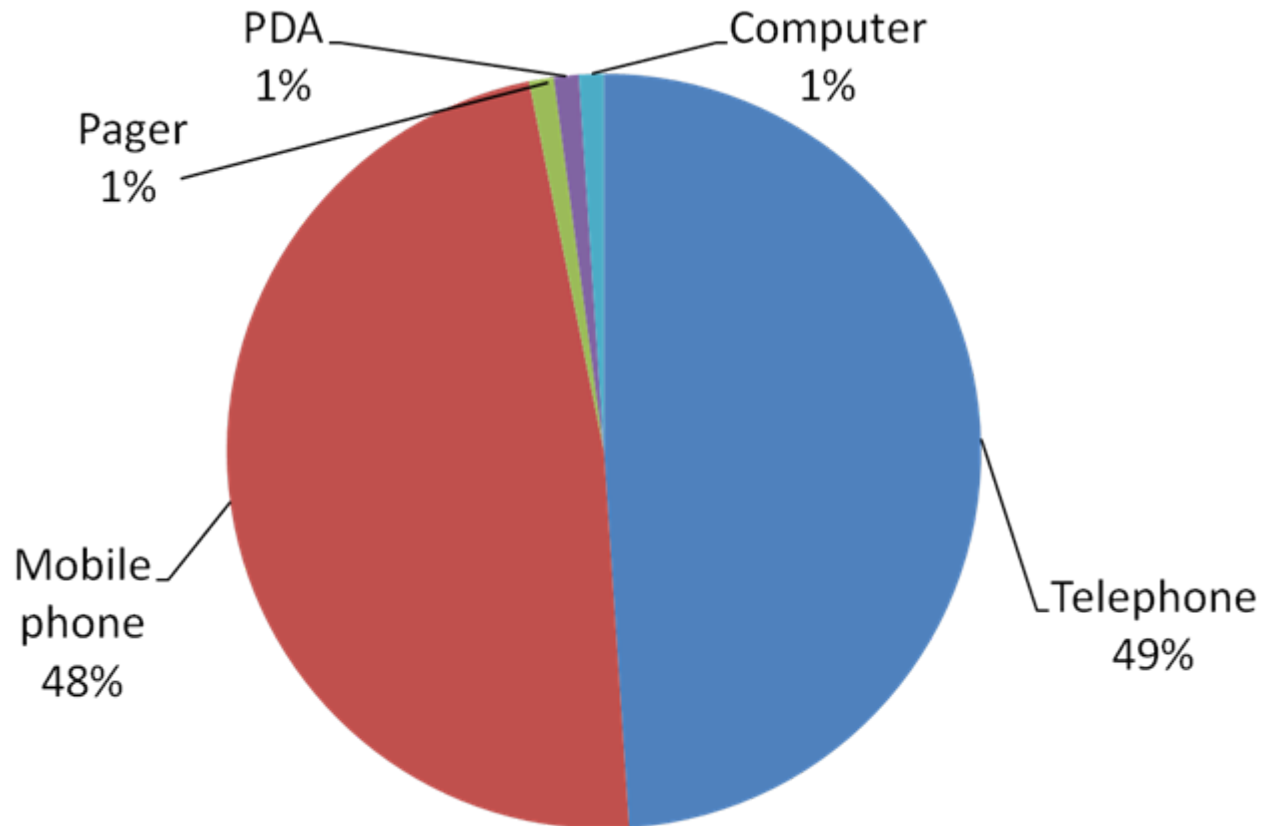# Results (demographic information)

-Response rate 74% (52/70)

-Gender distribution

Pie chart legend: Male (blue), Female (red). 35 (67%) Female, 17 (33%) Male.

Results (demographic information)

- Overall ICT availability at the GP centre

Results (level of ICT usage)

Use of computers

Purpose	Packages	Number (%)
Prepare documents	Excel, Word	12 (23%)
Making presentations	PP, Excel, Word	10 (19%)
Administration	Excel, Word	9 (17%)
Research	Internet, SSPS, Excel, Word	7 (13%)
Record keeping	Excel, own package	6 (12%)
Calculations	Excel, Word	5 (10%)
Pt. education	PP	5 (10%)
Planning	Excel, Word	4 (8%)
Recreational	Not specified	3 (6%)
Making animations	PP	1 (2%)
Image modification/analysis	Excel	1 (2%)
Overall		**9 (17%)**

Results (level of ICT usage)

Use of internet

Main purpose	Number/%
Search information on medical conditions	20 (38%)
Search information on educational options	14 (28%)
Pt education	8 15%)
Administrative matters	4 (8%)
Overall	**22 (42%)**

Results (level of ICT usage)

Store-and-forward communication

Main purpose	e-mail	SMS
Communicating with colleagues	**17 (33%)**	3 (6%)
Self-education	11 (21%)	0
Communicating with Pt.s	7 (13%)	**33 (63%)**
Administration	4 (8%)	**25 (48%)**
Communicate with educators	4 (8%)	0
Overall	**17 (33%)**	**16 (30%)**

Results (level of ICT usage)

Real-time communication

	Telephone	Mobile Phone	Video Conferencing
Usage	46 (88%)	45 (86%)	2 (4%)
Purpose			
Administrative	**36 (70%)**	**37 (71%)**	-
Answering to Pt.	1 (2%)	**39 (75%)**	-
Provide information/advice	1 (2%)	**37 (71%)**	-
Educational	-	-	1 (2%)
Recreational	-	-	1 (2%)

Results (perceptions/expectations)

Comment	Yes	No	Not sure
ICT will improve the quality of work	43 (83%)	2 (4%)	7 (13%)
ICT will facilitate work	41 (79%)	3 (6%)	8 (15%)
ICT would save time	37 (71%)	4 (8%)	10 (19%)
ICT will save cost	22 (42%)	7 (13%)	22 (42%)
	Important	**Not important**	**Not sure**
Importance of ICT in GP practice	48 (92%)	0	4 (8%)
	Very good	**Average**	**Poor**
Self-rated ICT abilities	12 (23%)	27 (53%)	10 (19%)

Results (perceptions/expectations)

Barriers for using ICT technologies

Comment	Number (%)
Lack of facilities/access	7 (14%)
Lack of education/training	4 (8%)
Lack of proper legal/privacy/confidentiality guidelines	4 (8%)

Conclusions

- The use of ICT in general practice was relatively low.

- However, it appears that both real-time and store-and-forward applications are equally in use.

- Although, the Internet and email use is low, mobile computing (mobile phone/SMS) is becoming popular.

- The users appreciated that the usefulness of ICT to improve the quality of care they provided