

# Mobile Phone Short Messages for Health Professionals

Yusheng Liu,\* Xirong Guo,† Rong Shen,† Fuzhou Wang,\*‡ Xiaofeng Shen\*,<sup>Δ</sup>

**Information communication technology has made great progress in past decades, whereas how much could the health professionals benefit from these techniques? Some reports concerned that mobile phone short messages can help health caregivers more focused on their work through reminding them what need do next, and positive results were presented showing that such “beep message” improves patients overall outcomes and satisfaction. Regarding this usage, several drawbacks need mentioned before it was recommended as routine reminder. Detraction from normal work, over-weighed dependence on this kind of remind, and uniform and non-individualized messages all will make the healthcare system lose flexibility and true efficacy.**

\*: Department of Anesthesiology and Critical Care Medicine, Nanjing Maternity and Child Health Care Hospital, Nanjing Medical University, Nanjing 210004, China

†: Institute of Pediatrics, Nanjing Maternity and Child Health Care Hospital, Nanjing Medical University, Nanjing 210004, China

‡: Division of Neuroscience, The Bono Academy of Science and Education, Winston-Salem, NC 27157, USA

Δ: Correspondence to: Dr. Xiaofeng Shen, No. 123, Tianfei Xiang, Mochou Rd., Nanjing 210004, China. Tel: +86-25-5222-6115; Fax: +86-25-8420-0723; Email: [sxf0418@njmu.edu.cn](mailto:sxf0418@njmu.edu.cn)

Submitted: 22 September 2013

Revised: 16 October 2013

Accepted: 04 November 2013

SCIENCE INSIGHTS 2013; 5(1):85-86.

Keywords: Healthcare - Efficacy - Short message - Cell phone - Individualization

**S**EVERAL studies had focused on the role of cell phone text messages in promoting health-care adherence to diseases management, and obtained intriguing results in practice (1-4). Again, Zurovac and colleagues published their work in the Journal and suggested the use of text messaging in case-management practice could improve health workers' performance in controlling malaria in resource-limited settings (5). As the authors declared that they received a long-term improvement in outcomes relative to other published data. We cannot fully agree with what the authors



said i.e. it is questionable whether or not all healthcare workers can tightly adhere to what the text messages suggested in a long-term period especially when the contents are invariant. To this question, we performed a survey upon the willingness and self-rated adherence to text-message's suggestion in the context of postoperative analgesia (Table 1).

In our study, we found the 72 physicians participated in the survey up to 86.1% did not want repeated short messages without any changes in contents, and they would even delete the

message without reading it. But only ten of them left praised such a text message reminded performance. Based on this, we further asked the survey participants why they did so and what they really wanted to. The first answer was they did not want identical and reiteration, and they want to a changeable style and should be reminded intermittently. Therefore, are there same questions on the recent publication (5)? Of our participants, 77.8% prefer to receiving only one message per day, and 12.5% of them do not want to get any message remind, and none is willing to be reminded five times or more.

In collection, mobile phone message remind for health professionals

**Table 1. Participants' demographics and response preference.**

Variable	Value
Total surveys sent out	95
Total respondent	72/95 (75.7%)
Respondent Male/Female	52 (72%)/20 (28%)
<b>Survey Questions</b>	
No repeated messages with same contents	62/72 (86.1%)
No reading and delete the message directly	44/62 (70.9%)
It is useful for health improvement	10/72 (13.8%)
Messages detract me from routine work	41/72 (56.9%)
It might be a message-dependent	58/72 (80.5%)
It will affect individualized treatment	47/72 (65.3%)
<b>How many messages are the best?</b>	
0 message per day	9/72 (12.5%)
1 message per day	56/72 (77.8%)
3 messages per day	7/72 (9.7%)
5 messages per day	0
>5 messages per day	0

has dual effects on the improvement of healthcare quality. For the most health caregivers, they prefer to receiving as less message remind as possible one day. It should be considered carefully before recommending such remind in routine care. ■

### ACKNOWLEDGEMENTS

This work is supported by the National Natural Scientific Foundation of China (NSFC, 30901397 and 81371248), Nanjing Municipal Outstanding Young Scientist in Medical Science Development (JQX12009), and Nanjing Municipal Grant for Medical Science Development (ZKX10018).

### CONFLICT OF INTERESTS

None

### REFERENCES

1. Fjeldsoe BS, Marshall AL, Miller YD. Behavior change interventions delivered by mobile telephone short-message service. *Am J Prev Med* 2009;36(2):165-73.
2. Cole-Lewis H, Kershaw T. Text messaging as a tool for behavior changer in disease prevention and management. *Epidemiol Rev* 2010;32(1):56-69.
3. Lester RT, Ritvo P, Mills EJ, Kariri A, Karanja S, Chung MH, Jack W, Habyarimana J, Sadatsafavi M, Najafzadeh M, Marra CA, Estambale B, Ngugi E, Ball TB, Thabane L, Gelmon LJ, Kimani J, Ackers M, Plummer FA. Effects of a mobile phone short message service on antiretroviral treatment adherence in Kenya (WeiTel Kenya1): a randomised trial. *Lancet* 2010;376(9755):1838-45.
4. Pop-Eleches C, Thirumurthy H, Habyarimana JP, Zivin JG, Goldstein MP, de Walque D, MacKeen L, Haberer J, Kimaiyo S, Sidle J, Ngare D, Bangsberg DR. Mobile phone technologies improve adherence to antiretroviral treatment in a resource-limited setting: a randomized controlled trial of text message reminders. *AIDS* 2011;25(6):825-34.
5. Zurovac D, Sudoi RK, Akhwale WS, Ndiritu M, Hamer DH, Rowe AK, Snow RW. The effect of mobile phone text-message reminders on Kenyan health workers' adherence to malaria treatment guidelines: a cluster randomised trial. *Lancet* 2011;378(9793):795-803. ■

