How Can the Medicines Helpline at Guy's and St Thomas' Trust Utilise Novel I.T. Platforms to Improve Accessibility for Patients with Medicine Enquiries?

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Introduction

Necessity for patients?

- **Prevented medicine errors** in 44/62 cases.[1]
- **Improved patient outcomes** such as medicine adherence in 46/62 cases.[1]
- Economic advantages of **reduced hospitalisation** as concerns regarding medicines and adverse drug reactions are addressed.[1,2]

Current platforms offering patient helplines?

- *At Guy's and St Thomas' Trust (GSTT):* **telephone hotline** available Mon-Fri 9AM-5PM with an **out-of-hours voicemail service**.[1,2]
- *Globally*: **Facebook** public forum where patients aged between 24-56 made 226 enquiries over a 12-month period in Australia.[3] A study of 821 patients showed 62% used **social media** or **mobile health applications** to access medicine-related advice, majority under 35 years old.[4]
- Doctors have recently begun offering advice via WhatsApp messenger.[5]

Aims:

- Identify patients' preferred method of accessing the medicine helpline at GSTT.
- Evaluate the current GSTT medicine helpline to improve its accessibility for all patient demographics.

Method

Questionnaire design:

- Questions looked to gather **patient demographic information,** whether patients would **use the helpline**, have **difficulty accessing the helpline** and had **a preferred method of contact**.
- Questions were either closed **(tick boxes**) or had a **free-text option** for qualitative responses.
- A **Likert scale** was used to quantify the popularity of using different platforms to contact the helpline.

Inclusion criteria

- Respondents over the age of 18.
- Any outpatient/relative/carer in the outpatient waiting area of the pharmacy or clinic within a GSTT hospital.
- Any inpatient/relative/carer on a ward within a GSTT hospital that gave verbal consent to complete the survey.

Exclusion criteria

- Any respondent under 18 years.
- Patients deemed too ill by the nurse in charge on wards.
- Patients within side rooms that were deemed infectious, unless accompanied by a relative or carer that could complete the questionnaire.

Data collection and analysis:

Questionnaire was piloted in a census sample (n=27) over 1 week at the Lloyd's outpatient pharmacy based in St Thomas' Hospital.
Surveying took place over **a total of 4 weeks in both Guy's hospital and St Thomas hospital** to obtain a sample of 100-200 questionnaires.
Quantitative data was categorized and analysed using IBM SPSS Statistics V25.0 software; a priori level set at $p<0.05$.
Qualitative responses were grouped using common themes.

Key Findings and Discussion

Demographics

Table 1. Frequency table showing the demographic data from completed questionnaires.

		n	(%)
Gender			
	Female	105	(52)
	Male	97	(48)
Age			
	18-35	67	(33)
	36-55	69	(34)
	56+	66	(33)
Disability			
	No	178	(88)
	Yes	24	(12)
Ethnicity			
	White	77	(38)
	Black	43	(21)
	Asian	37	(18)
	Other	30	(15)
	Mixed	13	(7)
	Prefer not to say	2	(1)

202 questionnaires were completed. As shown in table 1, there were almost **equal proportions of respondents of different genders and age groups**, as well as **equal splits in patients surveyed in the two GSTT hospital sites**.

Would patients use the helpline?

- 91% (n=184) of respondents had not heard of the helpline.
- 9% (n=18) patients had heard of the helpline, of which 2 had previously used the service.

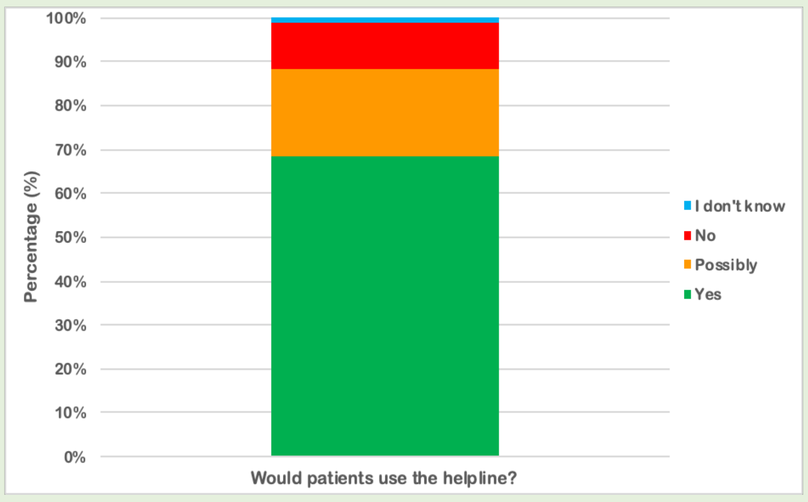

Figure 1. A stacked bar graph showing the cumulative percentages of patients that would or would not use the helpline.

Figure 1 shows that **88% (n=178) of patients would use** the helpline, reassuring the need for a patient helpline.
Reasons given for not using the helpline included:

- **Work commitments/lifestyle factors preventing contact** during current operational hours (51%)
- **Waiting times** whilst on the telephone
- **Disliking the use of telephone hotlines** in general
- **Preferring to use another language** (Arabic/Filipino)

Preferred methods of making medicine enquiries

Overall patient preference

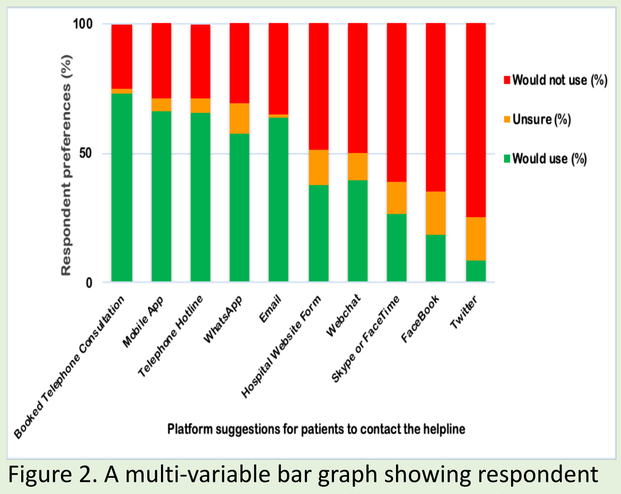

Figure 2. A multi-variable bar graph showing respondent preferences for contacting via different I.T. platforms.

Figure 2 shows that the **most popular method of contact was the booked telephone consultation** (73%).

The most common reason for using this was:

"it is easy and convenient to use"

WhatsApp & mobile health applications were also popular because:

"easy to use but unsure of it's confidentiality"

Social media sites were the least popular as:

"I do not have them"

Patient preference depending on age

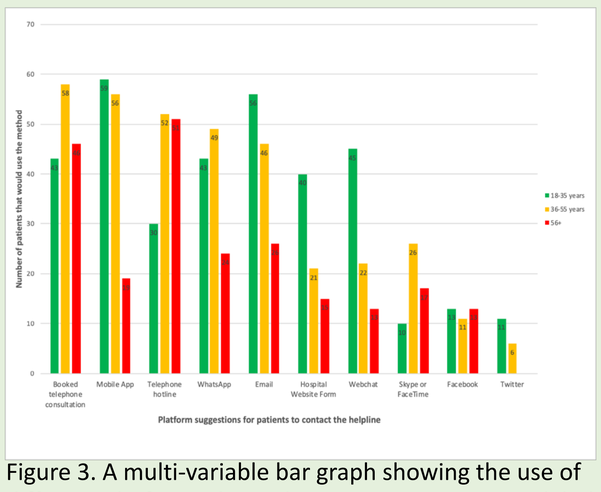

Figure 3. A multi-variable bar graph showing the use of different platforms depending on age groups. Data labels show number of users from the age groups.

Figure 3 shows that **respondent age influenced their preference** ($p=0.010$). **Booked telephone consultation was popular across all age groups**; its use **could prevent rehospitalization** in elderly patients as information given post-discharge or in manufacturers' information leaflets is commonly forgotten or unclear.[6] Platforms that used **technology were popular in all ages up to 55** but not popular for over 56 year olds.

Limitations

- As patients are told of the helpline after collecting their prescriptions, it was expected that many respondents had not heard of the service, unless previously admitted.
- Reasons preventing helpline accessibility may differ for those that refused to be surveyed.
- Generalization to wider populations such as London or the U.K. cannot be assumed as the sample size used was too small to be representative of larger populations other than GSTT.

Recommendations

1. Develop an online booking system on the GSTT website for patients to contact at a time suited to them and offer an out-of-hours service (including weekends).
2. Offer a mobile application that supports different languages to allow patients to access the service, including ethnic minorities who currently may find telephone accessibility difficult.
3. Future research: data protection implications patient helplines offered on social media.

1. Bramley D, Innes A, Dass N. Impact of Medicines Helplines on patient satisfaction, patient outcomes and medicines safety for hospital patients: the development of a rating scale and an evaluation of patients' opinions. European Journal of Hospital Pharmacy 2018. DOI: 10.1136/ejhpharm-2017-001459. 2. Mackridge AJ et al. Cross-sectional survey of patients' need for information and support with medicines after discharge from hospital. International Journal of Pharmacy Practice 2018; 26: 433-441. 3. Benetoli A, Chen T, Spagnardi S, Beer T, Aslani P. Provision of a Medicines Information ervice to Consumers on Facebook: An Australian Case Study. Journal of Medical Internet Research 2015; 17 (11): e265. DOI:10.2196/jmir.4161. 4. Barreto JE, Whitehair CL. Social media and web presence for patients and professionals: evolving trends and implications for practice. PMR Journal 2017; 9: 98-105. 5. O'Sullivan DM, O'Sullivan E, O'Connor M, et al. WhatsApp Doc? BMJ Innovations 2017; 3: 238-239. DOI: 10.1136/bmjinnov-2017-000239. 6. Crilly P et al. A survey to establish Greater London public perceptions of the use of digital technology and the role of the pharmacist when looking for health information. International Journal of Pharmacy Practice 2017; 25: 4-39. DOI:10.1111/ijpp.12367.