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DISTRIBUTION AND PERCEIVED VALUE OF TREATMENT GUIDELINES IN A LONDON TEACHING HOSPITAL DISTRICT: THE IMPACT OF PROMOTION

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INTRODUCTION

Treatment guidelines are used increasingly both as a way of ensuring health standards and as the basis of clinical audit.[1,2] At St George's Hospital, a comprehensive set of 'Guidelines for the Management of Common Medical Emergencies and for the Use of Antimicrobial Drugs' has been published continuously since 1979. New editions of the booklet are now produced every six months and cover 42 broad, drug related topics. It has a print run of around 1,000 copies and is given to all pre-registration house staff at an induction meeting and is sent to all remaining doctors with clinical responsibility in, or affiliated with, the St George's Group of Hospitals. In May/June 1991 we sent questionnaires to randomly selected staff in an attempt to determine the distribution and perceived value of the Guidelines. A second, abbreviated, survey was repeated in September/October 1992. Prior to the second survey we mounted a poster campaign telling doctors that a new (17th) Edition was available and informing them how extra copies could be obtained. This paper describes doctor's attitudes towards the Guideline Booklet (known locally as the 'Grey Book') and how distribution altered after a vigorous poster promotion campaign.

METHODS

The questionnaires were based closely on a customer/consumer survey questionnaire produced annually by the Drug and Therapeutics Bulletin. The 1991 questionnaire, which was distributed in May with a reminder in June, was concerned with three questions; who received copies of the Guidelines, whether the copies received were kept and how they were valued as a guide to clinical practice. The 1992 questionnaire, sent in September with a reminder in October, dealt only with the question of receiving and keeping. In the month to the second questionnaire posters announcing the forthcoming publication of the Guidelines raising awareness and giving details of new topics covered since the previous edition and where extra copies could be obtained were displayed throughout the main hospital.

Questionnaires were distributed to a selection of individuals randomly selected from the list of staff employed in the hospitals of Wandsworth Health Authority. For the 1991 study there were three cohorts: consultants; registrars and senior registrars; house officers and senior house officers and in 1992 a cohort of pre-registration house officers was added. All 204 consultants with clinical responsibility were identified and numbered and using these numbers 102 were randomly selected. Subsequently a second and third random selection of 50 per cent of the numbers between 1–204 was made. On one occasion the list was used to select the consultant's registrar/senior registrar, on a second occasion, in 1991, to select all levels of his or her house staff and, in 1992, to select only from those who

were registered; in 1992 questionnaires were sent without selection to all pre-registration house staff. In both 1991 and 1992 a reminder was sent with the aim of ensuring a response adequate for analysis. On both occasions recipients were asked to return their questionnaires anonymously.

Distribution of the Guidelines. The Guidelines are distributed through several distinct routes which have remained unchanged since 1990 and over the period of the study. All pre-registration house officers are handed copies of the Guidelines at their induction session. All clinically active consultant are sent three copies of the Guidelines Booklet in the week of its publication with a personalised letter suggesting that one copy should be kept and the others given to junior staff. The letter gives a contact number if more copies are needed. Copies of the Guidelines are distributed to all new doctors via the personnel department. Data collected were processed using the SPSS/PC software programme.

RESULTS

Response rate. The overall response rate to the 1991 questionnaire was for consultants 75 per cent (77 of 102), for registrars/senior registrars 72 per cent (74 of 102) and for house officers (pre- and post-registration)/senior house officers 52 per cent (54 of 102). To the 1992 questionnaire the response rate for consultants was 67 per cent (68 of 102), for registrars/senior registrars 63 per cent (64 of 102), for house officers (post-registration)/senior house officers 60 per cent (61 of 102), and for pre-registration house officers 68 per cent (19 of 28).

Receiving and keeping the Guidelines. Of the 215 who responded to the 1991 questionnaire 57 per cent had received a copy of the Guidelines and of these 90 per cent had kept it although in only 76 per cent was it the current edition. The actual numbers varied between cohorts from 58 per cent of consultants (89 per cent had kept them), to 49 per cent of registrars, 88 per cent of senior registrars, 57 per cent of house officers (post-registration) 81 per cent senior house officers and all of the 12 pre-registration house officers.

Of those who responded to the 1992 questionnaire the overall rate of reception had risen from 57 per cent to 79 per cent with 91 per cent keeping them and of these 84 per cent had the current edition. Again the number varied between cohorts so that of consultants 94 per cent had received a copy (95 per cent of whom had kept them), for registrars/senior registrars the figures were 67 per cent and 82 per cent respectively, for house officers (post-registration)/senior house officers 70 per cent and 90 per cent and for pre-registration house officers was unchanged at 100 per cent.

Perceived value of the Guidelines. In the 1991 questionnaire staff were asked how useful they had found the various guideline topics as an aid to the clinical management of patients (Table 1). When asked whether they believed it was beneficial for staff to receive guidelines, 91 per cent of consultants, 94 per cent of registrars/senior registrars, 83 per cent of post-registration house officers/senior house officers and all of the pre-registration house officers believed it was.

DISCUSSION

A distribution system developed over 12 years and believed to be comprehensive, delivered the Guidelines to only 57 per cent of those targeted. A poster campaign

TABLE 1

Doctor's view of the usefulness of the guidelines in the Grey Book*. Figures in percentages.

	House Officers	*Senior House Officers*	*Registrars*	*Consultants*
Numbers in cohort	(12)	(23)	(36)	(45)
Very Useful	20	9	6	3
Useful	55	35	28	29
Not Useful	18	26	11	4
Not Applicable	7	30	55	65

*The question asked was 'Please indicate for each topic how useful you have found it as an aid to the clinical management of patients'.

mounted to increase awareness and to provide a contact address (the Clinical Pharmacology Unit Office) where Guidelines could be collected increased distribution to all hospital staff. Posters were displayed in strategic places through the main hospital and medical school, and were the most likely explanation for the subsequent increase in number of those who received copies. However other factors may have contributed. Staff may have been keener to obtain copies following an increasing awareness of the value of guidelines coupled with widespread encouragement of their use. Finally, clinical activity at the hospital has often been audited against the Guidelines and this will have made them familiar to a widening audience. The increase in the number of recipients was particularly great for consultant staff, from 58 per cent to 93 per cent. Presumably before the poster campaign the consultant's copy was thrown away, and with it the copies for their juniors. The value of a poster campaign has been referred to by others[1] but not studied systematically.

If as shown a poster campaign is needed to help the distribution of an established set of guidelines (published for nearly 13 years), it is almost certain that an equivalent campaign will be needed when launching a new guide. We do not know whether the improved distribution has increased the utilisation of the Guidelines and this is now being investigated, though we have shown that 80 per cent of recipients keep copies and view their provision as beneficial.

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AN EGG-RELATED SALMONELLOSIS OUTBREAK IN SAUDI ARABIA

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The incidence of foodborne bacterial diseases is increasing world-wide with various types of *Salmonellae* identified as the leading aetiologic agent.[1,2] *Salmonellae* have been isolated from almost all animal species, but poultry and poultry products are emerging as the most important source of human infection.[2–4] The latter, including eggs, may now be responsible for more than 50 per cent of common epidemics of foodborne salmonellosis.[5,6]

We describe below the first large scale common vehicle poultry product related outbreak of salmonellosis reported from Saudi Arabia.

MATERIALS AND METHODS

In March 1993, an outbreak of gastroenteritis occurred in a company's complex. All members of the campus were interviewed regarding the food and beverages consumed and their illness if any. Clinical and epidemiological data were recorded on a specially designed form. A case of salmonellosis was defined as a person with diarrhoeal illness starting within 48 hours of consumption of food prepared in the common serving kitchen who also had Salmonella isolated from a stool sample or a rectal swab. Symptomatic individuals with a negative culture were labelled as probable cases. Patients with severe symptoms were admitted to hospital.

Samples of cooked and uncooked food items supplied by the common serving kitchen were cultured. All the patients and cooks had either a rectal swab, stool culture or both taken, the material was cultured using standard methods for isolation and serotyping.

Standard frequencies were calculated and Fisher's exact test and chi square test were used where appropriate to calculate significances.

RESULTS

The on site common kitchen had different serving areas for the two communities living in the complex. A total of 290 persons regularly ate from this kitchen; 110 from serving area A and 180 from serving area B. The dishes served to the two different areas were cooked separately. Out of 110 persons eating in area A, 85 ate rice with scrambled eggs and 70 developed symptoms of acute gastroenteritis; only one of the other 25 who had chosen an alternative dish developed the illness. Three of 180 persons eating in area B, developed the illness, one of whom had shared his friend's scrambled eggs. As shown in Table 1 the food specific attack rates were highly significant for scrambled eggs ($p < 0.00010$).

Forty-four of the affected individuals, all male, required hospitalization for

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