The contents of doctors' bags

— R P Clauss

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Curriculum vitae

Dr R P Clauss studied at the University of Pretoria and did this study while still a medical student.

Summary

A survey was undertaken to determine the types and contents of doctors' bags used by general practitioners undertaking post graduate study. It was found that all doctors in rural areas and most doctors in urban and peri-urban areas, have general bags. Some doctors also have motor vehicle bags and/or emergency bags. In this survey, most of the doctors were equipped with essential items. The contents listed in the tables could serve as a guide, but equipment and drugs should be added as deemed necessary, depending on individual circumstances.

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Information regarding the contents of doctors' bags is limited. Previous work was based on the opinions of authors[1,2,3], the disease profile in a family practice[4], and on visual inspection of doctors' bags[5,6,7] No survey, based on a questionnaire sent to general practitioners, could be found in the literature. Two publications[4,8] pointed out the need for an investigation which could serve as a guide as to what should be included in a doctor's bag used by general practitioners.

Method

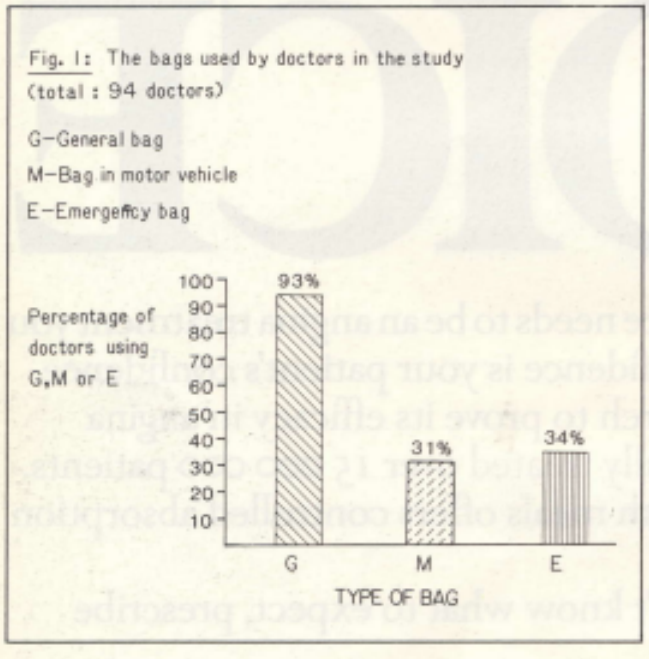
The study was undertaken from 15/8/1986 to 28/7/1987 on doctors who had attended a master's degree course in family medicine or a course in continuing medical education at a South African University. A questionnaire consisting of a list of instruments, medicines and other articles was sent to 272 doctors. Items on the list could be ticked off to indicate the contents of his/her individual bag. The type of bag was only listed but not defined in the survey. Thus, participants themselves could decide upon the type of listed bag they had (general, emergency, bag in motor vehicle). Comments and opinions were invited.

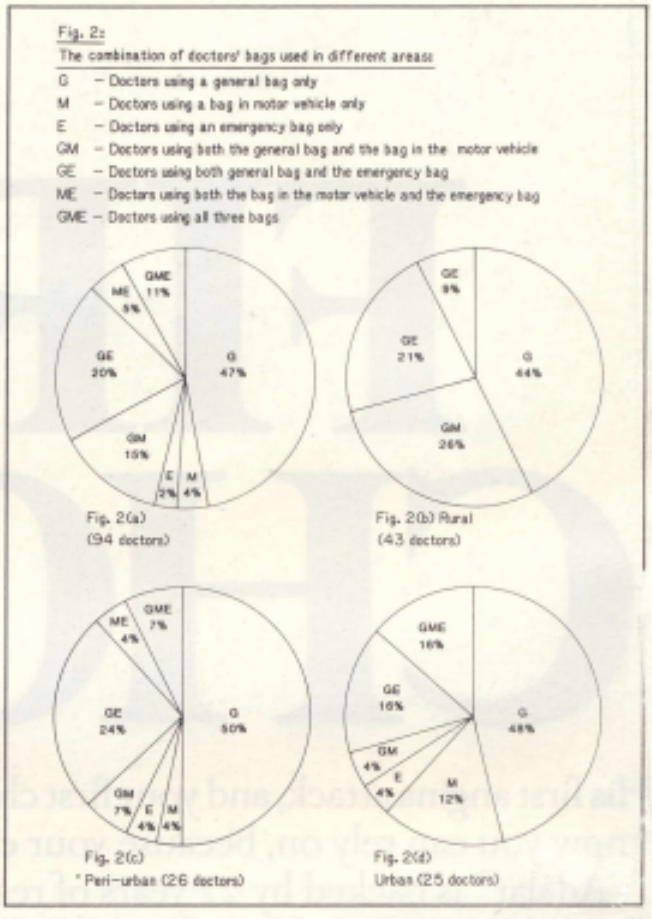
Results

The questionnaire was answered by 94(35%) of the 272 doctors mentioned above. Of these 5% were women. Thirty three percent (33%) of these doctors were in practice for 5-10 years, 43% for 10-20 years and 23% for more than 20 years. Eighty eight percent (88%) of the doctors were in private practice while 12% had fulltime appointments; 45% were from rural, 28% from peri-urban and 27% from urban areas.

Fig 1 shows the types of bags used by the 94 doctors who answered the questionnaire. Most of the doctors (93%) used a general bag. About one third also used a bag in the motor vehicle and/or an emergency bag.

Fig 2(a) shows the combinations of bags used by these doctors; 47% had only a general bag, 20% had a general bag and an emergency bag, 15% had a general bag and a bag in the motor vehicle, 11% had all three, while very few had only an emergency bag or only a bag in the motor vehicle. Fig 2(b) shows the combinations of bags used by doctors in rural areas, Fig 2(c) in peri-urban and Fig 2(d) in urban areas.





In rural areas all doctors had a general bag. About half of these had an additional emergency bag or a motor vehicle bag and 7% had all three types of bags. In the urban and peri-urban areas 84-88% had a general bag. Bags additional to the general bag featured less prominently than in the rural areas and consisted mostly of emergency bags. Some doctors had only an emergency bag or a motor vehicle bag.

According to the opinions offered by various doctors in this survey, the need for up-to-date maintenance of the bag was stressed. It was also mentioned by some doctors that certain conditions, eg serious trauma and other severe disorders should be treated in a hospital rather than by the doctor at home or at the roadside, therefore only minimum emergency equipment is considered necessary by these doctors.

The contents of the different bags, subdivided into instruments, other articles and medications are shown in Tables I, II and III. The tables indicate the basic and additional contents which at least 50% of the participants had in their bags. Basic contents were those items which were found in all areas (urban, peri-urban and rural) and additional contents were those items which were additional to the basic items and specific for the particular area (urban, peri-urban and rural)

Discussion

It must be pointed out that the questionnaire was sent to general practitioners who were interested in further study and were therefore not selected at random. The standard of medical practice of such doctors is presumably somewhat higher than that of most doctors who never attend such courses. It was decided to obtain the opinions of these doctors as their opinions could be considered to carry more weight.

Most publications to date distinguish the emergency bag and the general doctor's bag as well defined entities. Other bag types were: the standard bag[1], accident kit[6,9], and the resuscitation kit[9,10], obstetric bag[11], and the day-to-day bag[6]. The contents of the bags varied as much as their

TABLE I: The General Bag: Common contents present in the bags of at least 50% of the doctors.

	Instruments	Equipment and materials	Drugs
Basic contents (All areas)	Thermometer B P apparatus Diagnostic set Torch Spatulas Stationary Stethoscope	Gloves Syringes & needles Alcohol swabs Ampoule files Urine dipsticks	Atropine Diuretics Anti-convulsants Injectable analgesics Tranquilizers Adrenaline Anti-asthmatics Anti-emetics Anti-spasmodics Sterile H_2O Antibiotics Anti-histamines Anti-inflammatory Anti-arrhythmic
Additional contents Rural	Variable	Disinfectants Plasters Lubrication creams	Oral analgesics Vitamins Local anaesthetics Ergometrine
Peri-urban:	Patella hammer	Plasters	Variable
Urban:	Variable	Blood sample tubes	Variable

TABLE II: The bag in the Motor Vehicle: Common contents present in the bags of at least 50% of the doctors.

	Instruments	Equipment	Drugs
Basic contents: All areas	No basic contents common to all areas		
Additional contents: Rural	Variable	Variable	Variable
Peri-urban	Artery forceps Forceps Spatulas Scissors	Gloves Eye drops Syringes & needles Alcohol swabs IV infusion sets Ampule files	Tranquilizers Anti-emetics Sterile H_2O Antibiotics Anti-histamines Anti-inflammatory
Urban	B P apparatus Torch Stethoscope	Gloves Disinfectants Suturing material Bandages & swabs Plasters Needles & syringes Alcohol swabs IV infusion sets Ampule files	Atropine Anti-convulsants Analgesics (injectable) Adrenaline Anti-asthmatics Anti-emetics Sterile H_2O Local anaesthetics Anti-histamines Anti-inflammatory Anti-arrhythmics

TABLE III: The Emergency Bag: Common contents present in the bags of at least 50% of the doctors.

	Instruments	Equipment and materials	Drugs
Basic contents: (All areas)	Artery forceps Forceps Laryngoscope Ambubag Endotracheal tubes Needle holder Scissors	Bandages & swabs IV infusion sets	IV Infusion bags
Additional contents: Rural	Scalpel & blades	Splints Needles & syringes	Variable
Peri-urban	Scalpel & blades Magill forceps Tourniquet	Gloves Suturing material Rolls of plaster (eg Elastoplast) Needles & syringes Ampoule files	Injectable analgesics Adrenaline Anti-asthmatics Anti-arrhythmics Dextrose Anti-emetics Anti-spasmodics Sterile H_2O Antihistamine Sodium bicarbonate
Urban	Variable	Disinfectants Suturing material Plasters	Adrenaline Variable

owners. There was, however, a tendency that was evident in the literature as well as in the current survey, namely that the emergency bag was surgically orientated (Table III) and the general bag was medically dominated[2,6] (Table I). The results of this current survey show a cross section of basic equipment and medicines contained in doctors' bags. In addition, specific variations for the type of practice (rural, peri-urban and urban) were found. Examples here are the contents of the emergency bag in the peri-urban versus the rural and urban areas (Table III). The bag in the motor vehicle appeared to be individualised and is perhaps best compared to the reserve bag[12] in the literature.

The first and only other survey done in the RSA to ascertain what South African doctors carry in their bags, took place in 1964 when P J van Biljon visually inspected the general bags of 83 doctors in 45 different practices.[6] When that survey is compared to this current one, certain differences are obvious. In the van Biljon survey, geographic locality of the practice (urban, peri-urban or rural) did not have a significant effect on the contents of the bag, whereas in this survey, it did have a certain effect. Certain contents changed as well, for example the laryngoscope and urinary reagent strips which were present in the current survey, but not in the van Biljon survey. Although individual opinions may differ regarding the basic contents, one would regard at least certain items as essential for all doctors' bags.

These should include adrenaline, injectable analgesics (eg morphine), anti-asthmatics, anti-arrhythmics (eg lignocaine), atropine, dextrose, infusion sets, needles and syringes. These items were, however, not found in every bag. For example, dextrose was not found as basic or additional contents in many of the general bags and 44% of the participating doctors did not have dextrose at all. Four doctors did not have injectable analgesics and one did not have any anti-asthmatic medication. However, everybody did have adrenaline. Infusion sets were not kept in the general bag in any of the areas examined.

Conclusions

* All doctors in rural areas and most doctors in urban and peri-urban areas have general bags. In addition, some have motor vehicle bags and/or emergency bags. A few doctors in the latter two areas have only emergency and/or motor

The contents of the bags varied as much as their owners

vehicle bags and no general bag.

* The general bags could be regarded as being more medically orientated and the emergency bags as being more surgically orientated.
* The contents of doctors' bags listed in the tables could serve as a guide for doctors in family practice, but each practitioner should study his individual needs and should add such drugs and equipment as deemed necessary under the circumstances.
* All doctors should have at least certain essential injectable items eg adrenaline, morphine (or equivalent), anti-arrhythmics, anti-asthmatics, dextrose, infusion sets, syringes and needles. In this survey most doctors, but not all, were equipped with these and a few other essential items.

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References:

1. Carson NE, Murtagh JE. The Doctor's bag. Aust Fam Phys 1981; 12: 966-8.
2. Döttling H, Kühn F, Wedepohl W. Furnishing the doctor's bag. Z Allgemeinmed 1972; 48:1.
3. Lang WR, Kreider SD. The Little Black Bag. Medical travel kits for patient and physician. Postgrad Med 1983; 2:84-90.
4. Editorial. Die Dokterstas. S Afr Med J 1970; 44:473.
5. Van Biljon PJ. The doctor's bag (letter). S Afr Med J 1979; 55:73.
6. Van Biljon PJ. Die Dokterstas in: van Biljon PJ. Algemene Praktykvoering in Suid-Afrika: 'n Ondersoek na die werksmetodes, organisasie en administrasie van algemene praktyke deur middel van 'n aantal volledige ondersoeke van bestaande praktyke. MD Tesis; Universiteit van Pretoria, 1965.
7. Le Roux HF. The Doctor's bag (letter). S Afr Med J 1979; 55:864.
8. Editorial. The doctor's bag. S Afr Med J 1978; 54:633.
9. Murtagh JE. The doctor's bag: emergency equipment. Aust Fam Phys 1982; 4:279-80.
10. Simmons D. A resuscitation bag for every doctor (letter). S Afr Med J 1986; 69:163.
11. Morris S. The story of a "little black bag". J Roy Coll Gen Pract 1969; 88: 309-12.
12. Pistorius GJ, Pistorius CWI. Praktykvoering vir die Huisarts. Pretoria, HAUM 1986; 139-43.