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An important component of the 'consumer' community perspective is the need to market and grow its resources. So, to return to our pilot Mental Health Information Centre, please feel free to encourage any patient with psychiatric symptoms to call us at (021) 938-9229.

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OPINION

How to do research on a shoestring

Research is to clinical practice what a gymnasium is to an athlete; even though weight training or running is not, for example, the ultimate goal of a tennis player, it helps sharpen abilities. For the clinician, research sharpens powers of observation, enhances critical review of existing practices, and improves grasp of the theoretical and practical issues in routine clinical practice. One only has to look at who are top clinicians to see a considerable overlap with the list of researchers in a discipline. Research is a valuable forum to communicate ideas with colleagues. Lastly, research can be fun.

Funding for research in psychiatry and the neurosciences has been severely neglected in South Africa. Financial support for high-quality research is essential, and the lack of resources in these areas needs to be addressed urgently. There is no doubt that adequate funding enormously increases the possible scope of research; however, with creative use of available resources, high-quality research is still possible. This paper is not intended to be a definitive thesis on research methodology, but rather to motivate that research on a shoestring is both feasible and desirable in an austere budgetary climate.

Not only is research on a shoestring possible, but it may free the researcher from some of the limitations of funded research. It gives freedom to follow one's own instincts and ideas rather than those areas regarded as relevant by funding bodies further removed than the clinician from the area in question. The consequences of a negative result are less significant, and it allows flexibility for changes in research direction to be made more easily, since third-party funders are seldom happy about funds being directed to areas other than those approved.

A critical question needs to be asked: what is funding really necessary for? Frequently the answer is 'very little'. Usually facilities already exist, for example biochemical or radiological investigations, which are available to be used, even under the auspices of another group. There are a few unavoidable expenses, including literature searches and inter-library loans, consumables in laboratory experiments, and statistical consultation. However, there are ways around many additional expenses. Many pharmaceutical companies offer literature searches as a service and are able to assist with literature acquisition. Statistical analysis usually needs the input of a consultant statistician to ensure methodological rigour; however, the data
processing can often be done with one of the many statistical software packages by someone with some knowledge in the area.

The core to shoestring research is a 'ménage a trois' of a good idea and available resources and personnel. The good idea is probably the most critical element of the research process. The conversion of an idea into a sound researchable hypothesis is perhaps the most difficult task facing the researcher. It requires knowledge of the relevant literature and the ability to conceptualise the key theoretical issues. Material and personnel resources are frequently available in inter-disciplinary or inter-organisational collaboration. Large numbers of students, staff and colleagues are frequently keen on the idea of research, but hindered by fear that it is a complex and time-consuming activity with little visible reward. Gentle enthusiasm and guidance can be a useful antidote, and collaboration reduces the anticipatory anxiety associated with the responsibility of solo flying.

A key issue is availability. It is futile to attempt to research a subject to which access is restricted with a tool that is not immediately available. The core element to successful low-budget research is to use clinical material that is abundant. It is preferable to study those clinical issues with which you are in regular contact, and, combining observation with knowledge of the literature, to explore aspects that are feasible to research and do not require extensive addition to routine practice. Similarly, the tools necessary should either be routinely available, or available through collaboration.

Collaboration is currency. A colleague may frequently be happy to share time, equipment and expertise in exchange for a collaborative project that includes acknowledgement in the final product of their input. In an academic setting, assistance with a higher degree may often be a powerful motivation in terms of co-opting students or personnel into projects available on a collaborative basis. If writing is your forte, offer to collaborate by writing up someone else's research. For some reason the actual preparation of the manuscript deters many a novice researcher.

An alternative collaboration is to keep track of colleagues in overseas institutions, either overseas researchers you have met or expatriates. It is valuable to keep contact through e-mail and find out what they are researching. One thing about many 'first-world' institutions is that they have plenty of researchers but a dearth of subjects/patients, while in South Africa the opposite is true. Offer to collaborate through the collection of data here in South Africa, then use the overseas resources to analyse it and share writing it up, and you are involved. With the advent of e-mail communication the transfer of drafts is easy. A further benefit of overseas contacts is that offering to collect data may require that your overseas collaborators send you equipment, such as rating scales and pencil-and-paper tests, which can be used for further local study.

A simple addition to routine practice is to ask all your patients a core of basic simple questions relating to an idea or hypothesis you may have. This should preferably be in the form of a validated questionnaire or rating scale. Already you are generating data.

Funding is available in varying amounts from many sources, including departmental, university, institutional (Foundation for Research Development, Medical Research Council) and industry. In addition, many obscure research grants and awards are available in individual institutions and are worth searching for. A few principles are useful. The probability of obtaining funding is inversely proportional to the amount asked for. A rational and frugal budget that is accurately tabulated is more likely to be accepted than a generous loose request. Stick to core items; adding a new PC or a conference in the Bahamas is not likely to impress the funding authorities.

It is important to stress that expensive, high-technology investigations frequently do not provide more information than intelligent use of more modest resources. Conversely, if such resources are available, a tight, well-defined study utilising those investigations need not end up being prohibitively expensive if used collaboratively, in that often it is only consumables that need to be budgeted for, since the equipment is already available.

Research in an environment with limited resources is possible, and many of the perceived obstacles can be overcome with simple planning by combining observations, ideas and available resources.

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