Title: Identification of health-delivery functions of interns in resource-constrained settings

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Context and setting
Students completing medical school in South Africa (SA) complete a one-year (soon to be two-year) required internship before being licensed. Political pressure also exists for medical schools to change from six to five-year programmes.

Why the change was necessary
Little has been published to indicate what knowledge and skills SA interns need. An unanswered question for medical schools is how the two-year internship will impact on the curriculum, with or without introduction of a five-year curriculum.

What was done
An anonymous postal questionnaire survey of all interns who graduated from Stellenbosch University at the end of 2004 was undertaken during the first six months of their internship year, using open- and closed-ended items. Approximately 40% (56/147) of all interns responded. Qualitative analysis of responses to open-ended questions was undertaken. Non-parametric statistics were used for comparative analysis of quantitative data (Spearman R, \( \chi^2 \) test, Mann-Whitney U test and Kruskal-Wallis test).

Evaluation of the results and impact
Essentially all (98-100%) respondents reported handling non-emergency clinical conditions, doing outpatient consultations and managing inpatients daily/weekly. In open-ended questions, concerns included taking full responsibility for patient care, including triaging patients for admission and discharge when pressure for beds outstripped available resources.

Over 85% of respondents reported handling emergency clinical conditions (49). A majority reported performing resuscitations (including neonatal resuscitations) (30) and handling minor trauma (41), while about half reported handling major trauma (27) daily/weekly.

Over 90% reported performing common minor procedures (51) daily/weekly. These included drawing blood (including neonates), positioning peripheral and central intravenous lines (including young children and umbilical catheters), performing lumbar punctures and pleural taps, inserting intercostal drains, draining ascites, performing fine needle aspiration biopsies, inserting catheters (including supra-pubic), suturing, draining abscesses, removing sebaceous cysts, lipomas, lumps and ingrown toe nails, performing evacuations, release of carpal tunnel, tying off arterial bleeders and performing wound care. Over 80% reported performing common major procedures (45) including laparotomies, appendicectomies (23 daily/weekly). Over 70% reported administering general or spinal anaesthetics (39, 14 daily/weekly), even though 25 had yet to do a rotation through anaesthesiology.
Essentially all respondents reported having to handle difficult interpersonal situations (54, 31 daily/weekly) or ethical dilemmas (53, 27 daily/weekly). Responses to open-ended items listed concerns with coping skills and dealing with losing patients and counselling families.

Despite the fact that 47 respondents reported having had to “handle situations without adequate support from more senior medical staff” (24 daily/weekly) and 43 having to “do things that [they] felt [they] were not equipped to do safely” (7 daily/weekly), 87% felt well-prepared to deal with various demands of the internship. Respondents working in hospitals with ≥300 beds were significantly more likely to report inadequate support than those working in smaller hospitals (p = 0.045).

The survey results indicate that SA interns face a wide range of clinical demands, which are unlikely to change even when a two-year internship is introduced. Therefore, SA medical schools need to evaluate curricula in light of these demands, and the impact of a potential reduction from the current five to four year curriculum.

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