Mentoring the modern African surgeon: A call to arms!

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Abstract

Background
Surgical mentorship crosses both skilled training and the gamut of career choices and surgical decision making. The challenge also lies in the ideal mentorship balance that transcends the mere transfer of surgical skills and addresses other key components such as career development and research.

Objective
To explore the views and perceptions of surgical residents in Kenyan Institutions on mentorship and its importance in training.

Method
Sixty four surgical residents were surveyed. Thirty four (56%) were involved in a mentorship program. Twenty three percent of residents within an actual mentorship program reported satisfaction with their mentorship program. Mentors were perceived to be most critical in research and competency. Expectations were lower for their role in career development, handling stress and character building. About half of respondents felt that an ideal mentorship program would entail a structured mentoring program with regular monitoring.

Conclusion
Current uptake of mentorship roles is suboptimal. There is need to strengthen our mentorship links to enhance the support of new residents to balance professional and private personal needs.

Introduction

We must produce not only surgeons, but surgeons of the highest type, men who will stimulate the first youths of our country to study surgery and to devote their energies and their lives to raising the standard of surgical science' — ***William Halstead 1852-1922***

Over 100 years ago, Halstead described the desired attributes of a surgeon and they seem even more relevant to the practice of surgery in the 21st century. Historically mentoring in one form or the other has been employed to nurture trainee surgeons (1,2). However, mentoring in this rapidly changing world of modern surgery is becoming more complex than ever imagined. Today's surgeon is faced with unique challenges which go beyond surgical skills and sound clinical judgment. He is expected to acquire further technical, administrative, interpersonal and research skills (1).

Good mentorship thrives in a conducive environment, where surgical trainees can be nurtured to develop, learn and grow. Often, they would emulate their mentors. In one study, 73% of residents ended up in a sub-speciality similar to that of their mentor (3).

The challenges to achieving the goals of effective mentorship are immense. Consultants are stretched thin, between provision of tertiary care services, research, administrative responsibilities and education & training and time constraints (4). The advent of minimal access surgery, robotic surgery and technological advances in lesser invasive endoscopic and radiological procedures, pose another set of unique challenges for trainers and trainees. Mentors may find themselves in the position of transferring skill sets that did not compose an initial part of their training or that they themselves are also just beginning to acquire. Further challenges for mentors are the provision of this training within an ethical educational framework (5).

Developing countries frequently face resource based challenges. These nations have huge populations with both simple and advanced/neglected surgical diseases. Their ambient environments are also chronically depleted of human, material and physical resources. Providing effective, structured and supervised training in such an environment is in itself a huge challenge. Is mentoring and the development of mentorship programs a luxury in such constrained circumstances? Is there a role for the modern mentor in these settings? A multi-centre survey was carried out in Kenya, a developing nation, to determine the role of mentorship in this scenario.

Methods

Sixty four residents from three surgical training programs- the University of Nairobi (UON), the Aga Khan University (AKU) and the trainees registered with the College of Surgeons of East, Central and Southern Africa (COSECSA) were surveyed (Fig 1). The residents were at different levels of training - from first through to fourth year. The residents responded to a questionnaire that sought their views on mentorship.

The questionnaire based survey aimed to determine the residents' perception of the value of mentorship as related to their career plans, research opportunities, performance evaluation, clinical competency building and in personal character building. A Likert- point score: (1 - not useful 2 - useful 3 - very useful 4 – critical) was used to determine the relative importance imparted on these various aspects. The survey also established whether or not the resident was in a mentorship program, satisfaction with that particular mentorship program and views on what an effective mentorship program would entail.

Data was analyzed using SPSS software package.

Results

Sixty two responses were analysed (two responses were incomplete). Just over half of the residents, 34 (56%), were involved in a mentorship program. One third of those in a mentorship program, had no mentor. The rest had no mentorship program in their institution (Table 1). On further analysis of the existent programs, 42% of residents had a formal mentorship set up and 36% had an informally structured mentorship program (Fig 2).

	Mentorship program	**No Mentorship program**	**Total**
Mentor	22	4 (15%)	42%
No Mentor	12 (33%)	24	58%
Total	**34 (54%)**	**28(46%)**	**62 (100%)**

Table 1: Mentorship programs in Kenyan surgical training institutes

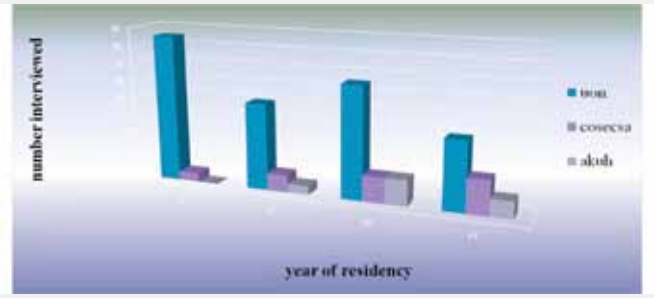

Fig 1: Characteristics of Surgical resident population

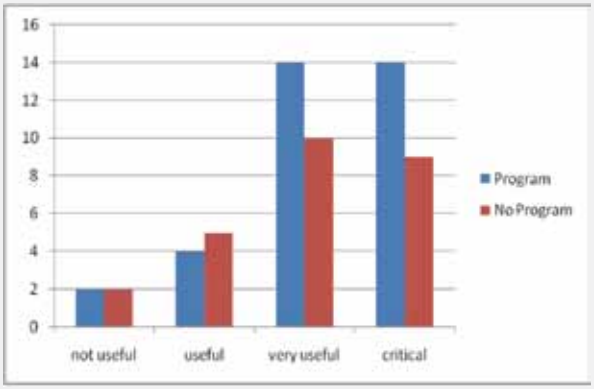

Fig 2: Utility of mentorship in education and competence

Utility of Mentorship

Majority of respondents felt that the primary role of mentors was in education and competence building and they valued the role of mentors on these accounts as very useful or critical. The same sentiments about mentorship were also demonstrated in the field of research (Fig. 3).

Similar opinions were not reflected in the choice of career plans; personal support to handle stress; evaluation of performance; and character building. In these areas, little role for mentorship was acknowledged.

Satisfaction with mentorship

Seventeen percent of respondents were satisfied with their mentorship program, with another 6% of respondents being highly satisfied. Fifty eight percent of respondents registered dissatisfaction with their mentors or mentorship programs. (Fig. 4)

Ideal mentorship program

Most respondents felt that a structured mentoring system with regular monitoring of the program would be an ideal situation. Twenty one percent of residents felt that one should be allowed to select one's mentor (Fig. 5).

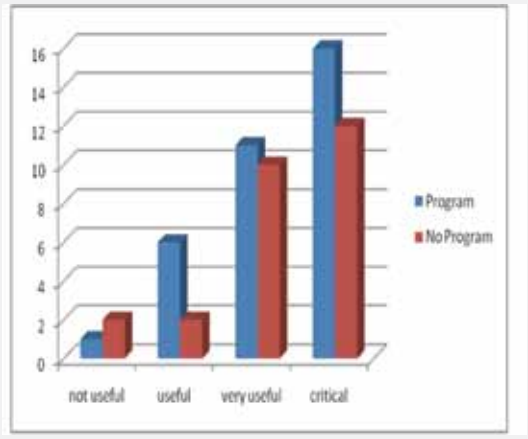

Figure 3: Utility of mentorship in research

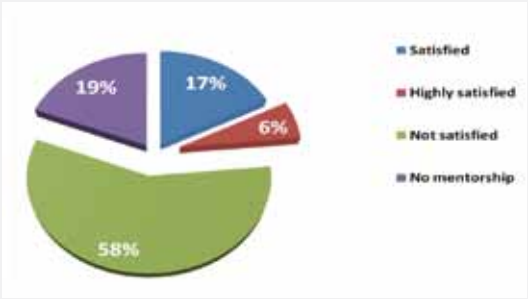

Figure 4: Satisfaction of Kenyan surgical residents with mentorship programs

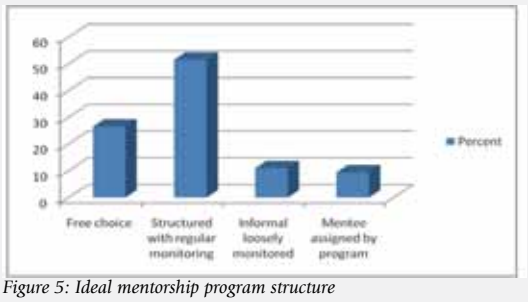

Figure 5: Ideal mentorship program structure

Discussion

The practice of mentoring continues to be influential for developing a dynamic, flexible and creative community of reflective practitioners in global educational settings (6). In surgery, whose roots are firmly embedded in Halsteadian apprenticeship, a significant amount of surgeons' personal development occurs passively and informally, predominantly through role modeling and mentoring provided by senior colleagues (7). The 'first youths' can only raise the practice of surgery by emulating what is before them.

The need for more surgeons in our region has been previously highlighted (8). But, there is data to show a waning interest in the profession amongst medical students and residents (9). Sustaining resident engagement in a training program and retaining medical student interest in surgery may revolve around building good mentorship links (9). Our results reveal that there is a need and desire for mentorship programs. Amongst residents in mentorship programs (58%), 38% had no mentors. Further, only 23% of residents within an actual mentorship program reported satisfaction with the program. This suggests a paucity of commitment, and in such an environment the entire construct cannot hold. The low satisfaction with mentor roles in handling stress, developing a career, character building or in performance, suggest that our mentorship roles must also continue to evolve. Just as surgeons must be the patients' advocate, the mentor must be the resident's advocate, ignoring prevailing winds and focus on nurturing an individual to learn and develop (10).

There may be several hindrances to effective mentorship in our region. The overwhelming working conditions in developing countries may explain the indifferene. A perception exists that mentorship may be extraneous, and merely a preoccupation of the developed world. Adwok has highlighted the constant conflict surgeons face between balancing their private work and teaching/mentoring duties (11). Ignoring this duality of practice, as a significant factor in our set up, may lead to further loss of mentorship roles (12).

Despite the inherent constraints, underdevelopment and resource poor settings pose different sets of challenges, which actually augment the need for contextual mentoring. It sets a distinctive agenda in such settings, which requires nurturing of 'mentees' on how to make difficult choices; self accountability; handling stress; and character building. It is through the sublimation of these processes and considerations, that the true multifaceted role of the modern mentor can finally emerge. This does not however suggest unilateralism. The success of mentorship is bidirectional where meaningful, consistent interaction and dialogue, built on time, dedication and patience, can result in a lifelong rewarding relationship for both parties involved.

There is a lack of consensus on an ideal mentorship program. Although both formal and informal programs

show benefits, Ford et al have demonstrated a more sustained mentorship when one was allowed to select one's mentor (13). The majority of our respondents felt that a well structured system with frequent checks and balances would prove invaluable. This is in keeping with previous reports (14). Perhaps, incorporating both these concepts and inculcating them into curriculum, could result in increased development and enthusiasm amongst young surgeons in training.

Donavan and colleagues demonstrated that of 199 Canadian postgraduate program directors subjected to a survey on mentorship, training programs with a mentorship program were more likely to be run by a program director who had been in a mentorship program or felt that mentorship played an important role in their training (15). If we are able to increase resident satisfaction with the mentorship process from the 23% found in our study, and increase our mentorship scope, it is the anticipation that future trainers of residents, will carry forward these concepts. Furthermore, there is the consideration that former mentees may perhaps make ideal future mentors.

Our study has several limitations. Many of our respondents were not actively participating in a mentorship program, thus may have offered responses from an idealistic perspective. This may have skewed the responses given. Our survey did not explore what the perceived limitations to mentorship were in our region and what would be the advantages of different mentorship methods. These concerns would require further exploration as we continue to develop a mentorship culture in our region.

In conclusion, although mentorship remains largely underdeveloped in our region, there is recognition of its potential benefit by residents. The challenge rests in all of us as mentors and would be mentors to rise to the occasion.

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