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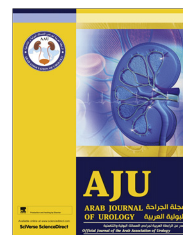

REVIEW

Is there a place for a holistic approach in surgical training?

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KEYWORDS

Family Medicine;
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ABBREVIATIONS

GP, General Practice;
FM, Family Medicine

Abstract ***Introduction:*** The holistic approach in medicine is a framework that considers and treats all aspects of a patient's needs, as it relates to their health. The goal of such an approach is to prevent illness, and to maximise the well-being of individuals and families. Holistic medicine is also referred to as integrative, which has been interpreted by some professionals as the combination of evidence-based medicine and complementary medicine.

The problem: The speciality of Family Medicine (FM) is often referred to as General Practice (GP), a terminology which emphasises the holistic nature of that discipline. Furthermore, GP/FM professional bodies in some countries have incorporated the holistic and integrative approach into curricula and guidelines for doctors in training, which reflects its acceptance as a component of medical training. However, despite this validation, and despite research showing the effectiveness of such strategies in enhancing the outcomes of surgery, a holistic framework or integrative approach has not been equally integrated into speciality training for would-be surgeons.

Conclusion: We argue that it would be advisable to include holistic approaches into surgical training and help surgeons to recognise their role in the continuum of care.

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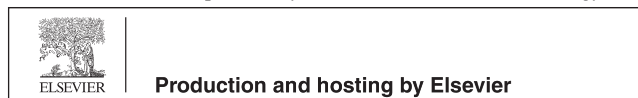

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Introduction

General Practice (GP), or Family Medicine (FM), is the part of primary care concerned with providing continuing and comprehensive healthcare for individuals and families throughout life, across disease categories, and across the parts of the body [1]. Furthermore, it deals with acute and chronic illnesses, as well as with disease prevention. This medical speciality is often referred to as ‘general’ practice, emphasising its holistic nature. In this review we discuss the principles of holistic medicine as they have been incorporated into GP/FM training, and discuss current and potential applications of such an approach to surgical training.

The holistic approach in GP/FM

In a presentation at the inaugural meeting of the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians in 1995 [2], a theoretical model of GP/FM was proposed: A global model, open-minded, considering disease as the result of organic, human, and environmental factors. This concept, which was also used in the framework document developed by WHO Europe, depicts health as both a part of and a result of a complex framework, in line with Engel’s bio-psychosocial ‘*holistic*’ model.

A further statement on the key features of the GP/FM discipline was prepared in 2002 [3]. This consensus statement defines the discipline, its core competencies and professional tasks. Agendas for education, research and quality assurance have been derived from these definitions, thus ensuring that GP/FM will develop in a manner consistent with meeting the healthcare needs of the target population.

According to these statements, GP/FM practitioners are primarily responsible for the provision of comprehensive and continuing care to every individual seeking medical care, with contextual consideration for their patients’ families, communities and cultures, whilst always respecting patient autonomy. They recognise their professional responsibility to their community. They *integrate* physical, psychological, sociocultural, existential and spiritual factors, using the knowledge and trust engendered by repeated contacts. They exercise their professional role by preventing disease, providing cure, care or palliation, and promoting health [3].

Holistic modelling is the ability to use a bio-psychosocial model considering cultural and existential dimensions. It is a concept in medicine which holds that all aspects of a patient’s needs, including psychological, physical and social needs, should be considered. This approach reflects a belief that health is more than merely the absence of illness, and supports comprehensive prevention strategies, as well as reaching higher levels of well-being and emphasising the connection of mind, body and spirit [4].

GP residency training mainly includes rotations in internal medicine, paediatrics, surgery, obstetrics-gynaecology and psychiatry [1]. The training focuses on treating the whole person and acknowledging the effects of all outside influences. This approach takes into consideration the biological, psychological and social environment in which patients live, through all stages of their life [5]. Accordingly, the emphasis is on disease ‘prevention’ and ‘health promotion’ [6]. Furthermore, it is known from research that mostly out of a desire for a more ‘holistic’ approach, some general practitioners are drawn to complementary and alternative therapies [7,8]. The term integrative medicine is used by some professionals to reflect this combination of practices and methods of evidence-based medicine with complementary medicine [9], and the Society for Teachers of Family Medicine has issued guidelines on including such an approach in the curriculum for GP/FM residents [10]. However, this kind of GP training is not universal but specific to structured training programmes that follow the principles outlined elsewhere in that paper.

Medical organisations representing GP/FM strongly believe that health promotion and disease prevention represent an essential part of the holistic approach in primary care. In 2010, the European Network for Prevention and Health Promotion in General Practice/Family Medicine prepared a policy statement on Prevention and Health Promotion in Primary Care [11], cited below:

- Disease prevention and health promotion should form an important part of the daily practice of European general practitioners/family physicians.
- High-quality primary care emphasises evidence-based health promotion and disease prevention. All preventive activities in GP/FM must be based on evidence and consider all possible iatrogenic and/or psychological risks.
- Most chronic non-communicable diseases have common avoidable risk factors (smoking, unhealthy diet, physical inactivity, risky alcohol consumption). General practitioners/family physicians have a particularly important role in;
  - counselling and promoting healthy lifestyles;
  - identifying possible health risks in their patients;
  - offering interventions to decrease health risks;
  - evaluating outcomes.
- When implementing preventive activities in clinical practice, issues such as cost-effectiveness, resource prioritisation and other logistical factors should be considered at local, national and international levels.
- Ethical and legal concerns must be resolved before any preventive activity in GP/FM is undertaken. The benefits and any possible harm should be clearly explained to adult patients and the parents of child patients, maintaining respect for the patient’s autonomy and informed choice.
- Adult patients and the parents of child patients must be involved as a partner in the planning of preventive activities, and in decision making about the measures needed. Their

decisions, concerns and preferences must be respected. Unless public health is threatened, patients or their parents should be free to decline the preventive activities offered with no repercussions on any other health care provided.

- A high level of vigilance is required when medications are used to prevent illness in healthy individuals. Such measures should be evidence-based, focused on individuals at a high risk, and accompanied by rigorous documentation for long-term results and side-effects.
- While appreciating the benefits of preventive activities, general practitioners/family physicians should be fully aware of the possible harm that these might entail (i.e., unnecessary preventive activities, medicalisation and overestimation of individual or societal expectations). Relevant medical education of general practitioners/family physicians should only be carried out by independent parties with no conflict of interest and by the national and regional public health services.
- General practitioners/family physicians should consider equity and accessibility issues in preventive tasks, ensuring these reach those who need them most.

Is there a place for the holistic approach in surgical training?

Whilst GP/FM training naturally includes disease-prevention and health-promotion strategies, it appears that such an approach is not so common during surgical training. To our knowledge, there are no guidelines for surgical training which incorporate such holistic approaches.

While surgery might not be considered the optimal pathway to health, we argue that it can play a key role in disease prevention. For example, surgical complications can be prevented through stopping smoking before elective surgery, administration of peri-operative antibiotics, preoperative bowel cleansing before certain types of operations, and prophylaxis to avoid deep venous thrombosis during surgical operations. Likewise, universal precautions to minimise the risk of disease transmission to healthcare workers and to other patients are learned by trainees during surgical training. Furthermore, prophylactic surgery seems to gain importance in the prevention of certain diseases, as genetic technology increasingly enables the detection of disorders before they develop [12].

Some special integrative services before and after surgery can also be useful to reduce anxiety about the imminent surgery, and to enhance the patients' ability to heal and recover. Extensive research has shown the effectiveness of integrative medical strategies to improve the outcomes of surgery. As one example, a lower level of stress and anxiety is associated with improved outcomes of surgery, including fewer complications and a faster recovery [13]. Some 'mind–body' techniques have been shown to decrease stress and anxiety, reduce pain, lessen the amounts of medication required, and even reduce blood loss during surgery, all of which might result in a shorter hospital stay [14]. In another study, preoperative intradermal acupuncture has been shown to reduce postoperative pain, nausea and vomiting, analgesic requirement, and sympatho-adrenal responses [15].

For too long it seems the surgeons have regarded the patient as an object to be operated upon. This might be a prejudice of those who are not surgeons, but there is certainly some truth in it. In times of a ready and simple Internet-based information flow for patients, of clinical governance, informed consent and increasing accountability of doctors for their practices, there must be some trust between doctors and patients that is based on information, best practice and a holistic approach that considers all aspects surrounding the patient's health (and not only the prevailing surgical problem).

Holistic medicine requires a team approach, and the surgeon must be part of this team. To be a successful team, with respect to patient health outcomes, surgeons must understand all other team members and be understood by them. It therefore appears appropriate to train surgical residents in the principles of holistic integrated medicine as a complement to their technical skills.

Conflict of interest

None.

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None.

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