Intensive Care Med (2019) 45:1130–1132
https://doi.org/10.1007/s00134-019-05673-3

EDITORIAL

Focus on ethics of admission and discharge policies and conflicts of interest

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Ethics (or moral philosophy) is defined as a field of expertise that involves "systematizing, defending, and recommending concepts of right and wrong behaviour" [1]. Within the context of medicine, ethics span across a major part of the decision-making process and are required to be cross cultural. In this paper, important publications on two ethical issues that require both knowledge and self-awareness of the critical care physician are reviewed in brief.

Admission and discharge policies

Increasing patient age and complexity and the rising cost of intensive care make triage to intensive care a growing challenge. Given the shortage of beds, a policy of "watchful waiting" may be viewed as prudent. However, Harris et al. recently challenged this approach. Using instrumental variable analysis (and thereby elegantly bypassing the need to correct for clinical patient condition) [2], they studied 12,380 intensive care unit (ICU) admissions in 48 United Kingdom hospitals and showed that admission within 4 h of triage was associated with improved survival but less common with increasing critical care bed occupancy [3]. Unfortunately, patient admission and discharge decisions are often driven by unseen causes. Anstey et al. surveyed Californian doctors ($n=203$) and nurses ($n=1101$) and found significant differences (favouring inappropriate admission) between perceptions regarding the appropriateness of ICU admission and actual admission of patients who are either too well or too ill to benefit from intensive care [4]. Jerath et al. discovered huge inequities in provision of post-operative ICU care in Canada ($n=541{,}524$); older age and greater comorbidity was associated with more prompt ICU admission, but the interhospital admission rate varied 100–200-fold for certain types of surgery, with unexplained local hospital practice accounting for much of this variation [5].

The price of redundant intensive care admission is difficult to quantify. Given the lack of beds, it is safe to assume that each redundant admission likely necessitates a potentially early discharge. It is also reasonable to assume that less thoughtful admissions occur outside office hours when decisions are made by more junior staff and manpower is less abundant. Vollam et al. meta-analysed data from 18 cohort studies (more than a million patients) and showed that, regardless of healthcare setting or geographical location, discharge from the ICU outside of office hours was strongly associated with both in-hospital death and ICU readmission [6]. Redundant ICU care may be decreased by forgoing ICU admission altogether or by setting a time limit to the provision of ICU treatment. Based on their review of the literature, Vink et al. propose that a time-limited trial of ICU treatment (TLT) be decided upon in selected patients at the time of ICU admission (i.e., when patient preference or the response to a treatment require elucidation), when complications occur during ICU stay or with a poor response to ICU care [7]. TLT decisions should ideally be made with the patient and/or their representative or at least be communicated to them. Sharing such information lays the foundation for realistic care expectations and guarantees a climate conducive to interdisciplinary ethical reflection with subsequent decision-making, rather than focus on theoretical discussion alone.

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Can patient interests be aligned with those of the doctor or the medical system?

In most patient–physician interactions, patients choose their treating physician. The selection process itself engenders trust; the patient is unlikely to refer to a physician, whose judgment they do not value. In intensive care, this relation is born of necessity. This makes patients and relatives vulnerable to both perceived and real disrespect [8]. The paucity of evidence confirming the benefits of specific treatments in the complex ICU environment exacerbates the dilemmas [9]. This situation, combined with the limited resource of ICU care, requires that both the individual intensive care physician and our profession remain above reproach with regard to conflicts of interests (COIs) (Fig. 1).

As with any other problem, the first step towards overcoming COI requires that its existence be acknowledged. Annane et al. put forward that COIs are integral to human nature, but often remain unrecognized by the individual. They proposed that medical schools teach identification and management of professional COIs and that institutions involved in the health sector have regulations and policies for prevention and early detection of COIs. They also suggest that independent ethics boards should assess self-declared COIs before publication [10]. Such an arrangement would be ideal had medical school teachers and ethics committees not been comprised of humans with potential COIs of their own. In a narrative review on COIs in infection prevention and control research, Abbas et al. demonstrated the all-pervasiveness of COIs, highlighting not only the relationship between industry and physicians, but also those with journal editors, guideline committee participants, and authors. They described the potentially devastating consequences of institutional COIs when these are torn between the need to report infection rates and the need to maintain a good public image, and the risk that COIs may distance guidelines from implementable practice [11].

Vincent et al. argue that industry support boosts research and international collaboration [12]. While

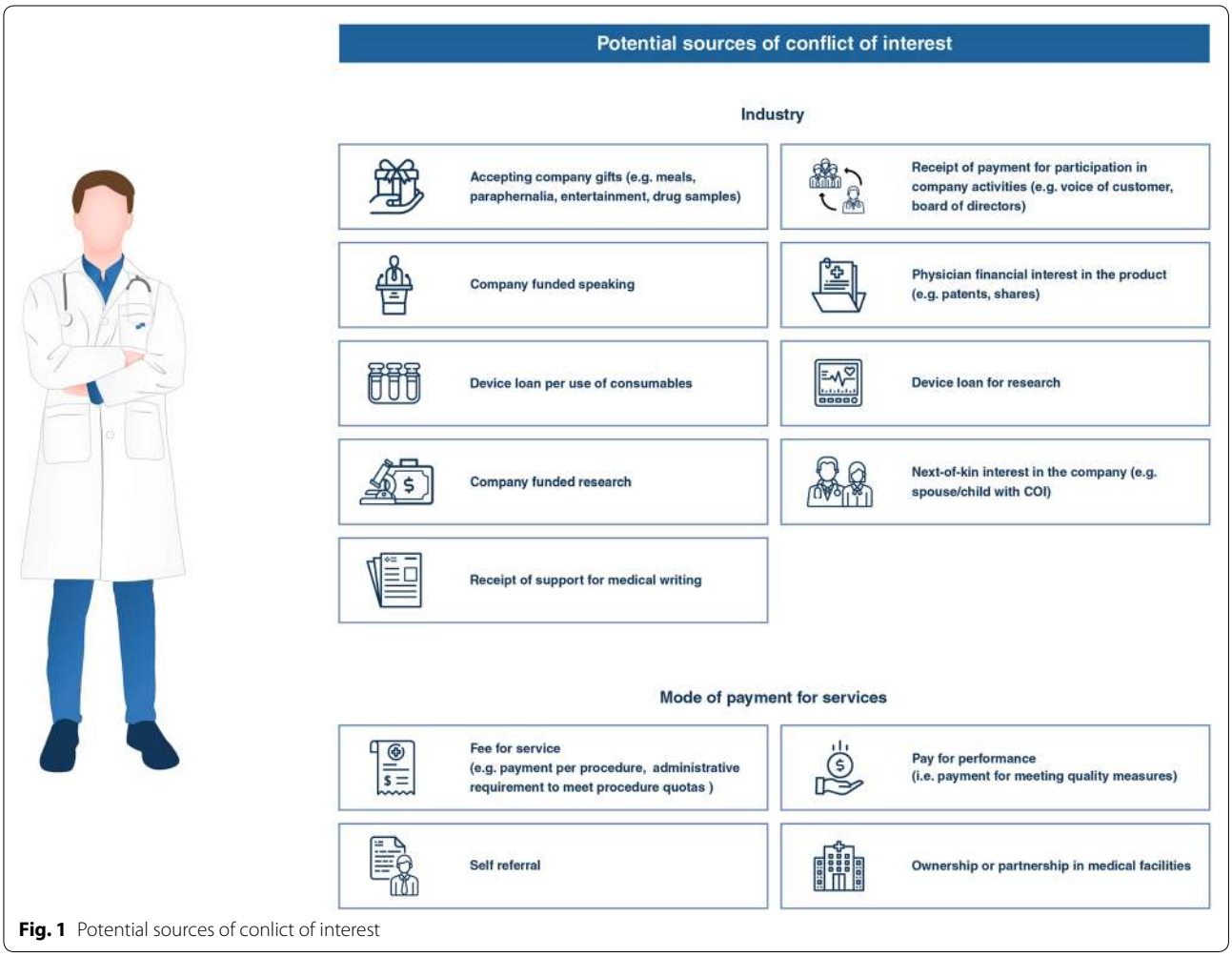

Fig. 1 Potential sources of conlict of interest

undoubtedly true, the question remains: at what other cost? Most writers of guidelines are funded by relevant industry [13, 14]. Claiming "everyone did it" does not make a wrong right. While it makes sense that experts in their field have a strong relationship with industry, this does not promote trust in the guidelines. In an almost biblical spirit—"(do) not come to call the righteous, but sinners to repentance" [15]. Vincent et al. also argue that if COIs are declared, trust is maintained. Still would most people not trust the righteous more than the sinner? Furthermore, as succinctly noted by Brochard and Kavanagh, declarations of COIs also have limitations: they may change over time, create a false sense of full transparency, lead authors to feel absolved of responsibility towards integrity, and hide important relationships in full view [16]. Still, there is some hope for the future.

Zhang et al. systematically analysed published RCTs comparing treatment with goal directed hemodynamic therapy or usual care to evaluate whether reported patient outcomes are related to the presence of COIs. Although 53% of the identified studies had COIs, the reported outcome was relatively neutral when industry involvement was limited to the loan of a device, but more positive in studies with author COIs or industry funding. [17]. This suggests that certain forms of industry support maintain objectivity. It behooves our community to identify, develop, and encourage these forms of support. Darmon et al. searched four 1-month periods every 5 years between 2001 and 2016 and showed that the rate of both COI statements and declared COI increased over time [18]. Our understanding of the potential impact of COIs is undoubtedly increasing. It is nice to see that with greater knowledge also comes a greater sense of responsibility.

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Compliance with ethical standards

Conflicts of interest
SE has received competitive Grants from the Israel Ministry of health, National Health Policy Research Institution, funding for travel, lectures, and owns patents with and/or performed consultancy work for Zoll, Medtronic and Diasorin and has participated in multicentre trials run by Artisanpharma, Eisai and Astra Zeneca. DDB has received a senior clinical investigators Grant from "Fonds voor Wetenschappelijk Onderzoek" (1800518).

Publisher's Note

Received: 23 April 2019 Accepted: 16 June 2019
Published online: 2 July 2019

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