Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Better late than never: a re-examination of ethical dilemmas in coping with severe acute respiratory syndrome

K.L. Ovadia, I. Gazit, D. Silner, I. Kagan

Unit of Infectious Diseases, Assaf-Ha-Rofeh Medical Centre, Israel
Assaf-Ha-Rofeh Medical Centre, Israel
Department of Nursing, Tel-Aviv University, Israel

KEYWORDS
SARS; Ethical dilemmas; Emerging pandemics; Decision-making

Summary
At the end of 2002 severe acute respiratory syndrome (SARS) emerged and spread worldwide. The pathogen was unknown, as was its mechanism of transfer, and there was no effective therapy for the disease. There was a large element of hysteria and anxiety in society’s reaction to SARS. The initial steps taken to cope with SARS were clear-cut and even dramatic. Decision-making in a time of emergency is associated with a high potential for ethical dilemmas and conflicts. In the course of efforts to cope with a threatening disease, it is important to appraise our activities from an ethical point of view. A retrospective look at this period of time shows that we did not do this. This article examines the ethical aspects of the process undertaken to cope with SARS in our medical centre.

© 2005 The Hospital Infection Society. Published by Elsevier Ltd. All rights reserved.

Introduction
At the end of 2002, severe acute respiratory syndrome (SARS) emerged. In a short period of time, new SARS cases spread around the world, information on the epidemic flooded the news, and healthcare organizations were faced with a new challenge. The disease was contagious, relatively fatal and thought to be contracted by droplet contamination. Healthcare workers (HCWs) were also infected and died from the disease. In Israel, there were a number of suspected SARS cases, but none were confirmed after testing. Due to the uncertainty and fear associated with the new phenomenon and the lack of guidelines or a clear policy, the initial steps taken to cope with SARS required fast clinical and administrative decisions. Decision-making in a time of emergency is associated with a high potential for ethical dilemmas and conflicts.

The aim of this article is to examine the ethical
aspects of the process undertaken to cope with SARS in our medical centre.

Background

The issues discussed in this article were raised during re-examination of the process undertaken to cope with SARS, and whilst constructing a preliminary programme in preparation for the next emerging infection. We will focus the discussion on the practical ethical aspects of clinical decisions made during the outbreak. Many of the dilemmas we encountered are likely to be faced repeatedly in the future, and we feel it prudent to raise these issues for examination by the larger healthcare community.

It is important to recognise that when we began dealing with SARS, we knew we were dealing with a disease that was fatal, contagious and with a high risk for HCWs. The pathogen was unknown, as was its mechanism of transfer, and we had no effective therapy for the disease. There was a large element of hysteria and anxiety in the community's reaction to SARS, and as one Chinese physician reported, 'Many patients were less sick to death than scared to death'.

On 16 March 2003, the Unit of Infectious Diseases issued initial instructions on this emerging syndrome to all the units at the Assaf-Harofeh Medical Centre. The Israeli Ministry of Health issued their first memo on 30 March 2003, and designated our hospital as a centre for screening SARS patients. The instructions issued by our unit and the ministerial memo did not deal with any ethical or legal issues related to coping with SARS. We cared for 19 cases of suspected SARS between 19 April and 14 June 2003, and none of these cases were confirmed after testing.

National guidelines for coping with SARS were published by the Israeli Ministry of Health. The policy included the designation of four regional medical centres for screening suspected SARS patients. This was in line with other SARS-infected areas where, with the goal of isolating the disease and preventing its spread, hospitals were designated SARS or non-SARS. In China, for example, a new hospital was dedicated solely to the treatment of SARS patients. In Israel, incoming passengers from SARS-infected areas had their temperature measured in the airport, nurses screened travellers for suspicious symptoms, and aeroplanes were cleaned scrupulously. Mandatory isolation and quarantine of suspected and probable cases of SARS were enforced and, for a short period, flights between China and Israel were suspended.

At the healthcare organizational level at our medical centre, a specific ward was designated to care for the suspected SARS cases. Within the ward, an isolation unit complete with High Efficiency Particulate Air (HEPA) filters, an antechamber and negative air pressure was constructed. Personal protective equipment (PPE) was initially supplied to the HCWs by the hospital although the Ministry of Health ultimately shouldered this financial burden. Specific HCWs were assigned to care for the patients on each shift, and these HCWs were monitored in light of the possibility of exposure, contagion and need to quarantine.

At the level of patients and family, isolation was strictly enforced. Adult patients were not allowed visitors. In the case of a hospitalized child, the mother or father was allowed to stay in the isolation unit. Upon discharge, home quarantine was enforced and instructions on infection control in the home were supplied to the families.

All decisions at the organizational and patient level were made with no ethical consultation or support.

Ethical decision-making, rights and emergency

In retrospect, we are aware that we infringed the human rights of the citizens in our care. These include the rights of liberty, freedom of movement and privacy. We limited the rights of patients to interact with family and friends, the rights of citizens to engage in international commerce, and the right to informed consent for examination and treatment. Other rights may also have been infringed.

Patient and family

Should visitation rights be allowed?

Immediately upon admission of the first case, the infectious diseases specialist gave instructions not to allow any visitors whatsoever; this appears to have been standard practice in SARS-infected areas. The nursing staff of the Infectious Disease Unit did not contest this decision, in part due to their status as nurses facing a doctor’s decision, but mainly as professionals lacking confidence regarding knowledge of the disease. More disturbing is the fact that in the course of caring for the patients, we did not re-examine this decision in the light of new knowledge. However, it is important to note that
the extreme safety measures applied at the time reassured many of the staff involved in patient care and the greater community.

If patients are children, should parents be allowed to stay? At what age should this be limited?
Conforming with holistic nursing and medical approaches, we decided that a parent should be allowed to stay with any paediatric patients. As we had no paediatric patients, we had additional time to consider the ethical dilemmas and their ramifications. The limits we placed on the parent were that they must remain in isolation with their child. Did we have the right to allow the parent to place him or herself in danger? How much were we swayed by an instinctive parental desire to protect one’s offspring, because it is obvious that a parent remaining in isolation with a patient would be at great risk as the use of PPE would become virtually impossible?

If there was a death, should the family be allowed to see the body?
Heated discussions were held on this subject. Eventually, in deference to the rights of family members and to their need to take leave of the dead, we established a protocol that would allow family members, individually and accompanied by staff, dressed in PPE, to view the body but by no means to touch it. This was in keeping with the guidelines issued by the Ministry of Health of Malaysia on the handling of SARS victims, and which allowed three people to view a body.2

Healthcare workers

Do HCWs have the right to refuse to treat contagious patients?
This was an emotive issue. There were those who considered that care for the patient is an integral part of our professional values, whatever the cost. In direct opposition to this were those who defended the right of the HCW to protect his/her own health and the health of their family. We now know that in SARS-affected areas such as the Far East and Canada, nurses’ reactions also varied, from voluntarily remaining quarantined in the hospital, to resigning from their jobs, and to receiving large sums of money for caring for SARS patients.3 We read with great interest the approach adopted in Toronto, Canada, which appeared to be based on a system of voluntary care.4 We do not know what the outcome would have been if any HCW had categorically refused to care for the patients.

Differences between HCWs: pregnancy, age, sex, marital status
The principle of equality where equal demands are made on all HCWs is very clear. However, the needs of the individual HCW often receive priority in the daily practice of rendering care. This is especially true of pregnant HCWs (in Taiwan, a nurse in her seventh month of pregnancy died after being in contact with an undiagnosed SARS patient5), but other needs also come into play, such as those of parents of young children. Although it was not openly discussed, our impression is that many of these issues are raised as a cover for the personal fears of the HCW, which are no less important or valid for being less addressed.

Does the HCW have the right to refuse to use PPE?
If a HCW does not believe the suspected diagnosis and/or the use of PPE, do they have the right to refuse to use it? We were of the opinion that they did not, as such an action could imperil themselves and the community. Although a physician, nurse or other HCW has the right to their professional opinion, in this case, we felt that they should not be allowed to over-rule the decisions made on the basis of infectious disease protocols.

Organization

Which ward should be chosen for accommodating suspected SARS patients?
The choice of a ward in our hospital was problematic. A ward was chosen on the basis of its position in the hospital, being physically removed from the main buildings. The staff was briefed and the ward initially prepared for the patients, but on further consideration the distance from such services as the ICU and imaging services rendered it unsuitable. Physical and engineering considerations brought the choice down to four internal medicine wards. No ward staff was particularly interested in taking on the role, and the possibility of volunteering for the task was not raised at the time. A ward was chosen by the administration. This decision was implemented immediately and requiring the reorganization and reeducation of staff.

Should the ward be limited to suspected SARS patients alone?
The ward was not used for suspected SARS cases alone, although a subunit with HEPA filtration, negative air pressure and an antechamber was dedicated to the suspected cases. Despite this, some believed that other patients and their relatives had been exposed to a risk of SARS.
Should the SARS hospitalizations be publicized?
While believing in the right of the public to know, the administration feared the results of labelling the centre as ‘SARS designated’, which might have caused people to avoid hospitalization and jeopardize income for the medical centre and its employees. Due to the existence of very active press in Israel, the hospitalization of each patient was reported to the media.

Should the other patients in the same ward be told about the presence of SARS patients?
It was felt that other patients were entitled to know of the presence of potential SARS patients, if this put them at risk. However, telling them could have resulted in the spread of panic and caused damage to the reputation and financial status of the institution. Patients were not informed formally, but they and their families were able to see that portion of the ward dedicated to the suspected SARS patients and the instruction notices for staff.

How did we make the decisions?
Our judgements and decisions at the time were based on a number of premises, the first of which is the belief that society’s rights have precedence over individual rights. Next is the belief that our profession exists to care for the sick despite any element of risk, as is often expressed in our professional values and ethical codes. No less important was the personal and professional commitment of our staff and the role of common sense that helped immeasurably in coping with many practical difficulties. Finally, our professional knowledge and understanding of disease processes and contagion were of great service.

All the decisions were made in a state of emergency with a high level of uncertainty. There was a worldwide lack of knowledge and experience despite the online updates on the Internet, and there was worldwide stress and hysteria, perhaps due to these online updates. The decisions were based on traditional and proven infection control principles and practices. It is important to be aware that there were no proven cases of SARS in Israel, so the outcomes of these decisions were not put to the test.

However, the Government decided which hospital to use. The Hospital Management decided upon the ward. The Unit of Infectious Diseases decided which HCWs should be involved, and the ward staff decided who would care for the patients. HCWs had limited choices and took decisions on behalf of the patients, and patients had no input, choice or no control.

It is important to clarify that, in emergencies, one is forced to make decisions under pressure. We learned that the process of decision-making was very important. We attempted to prevent potential conflicts, supply information and made every possible effort to relieve the pressure and inconvenience related to forced isolation and limitation of basic rights and freedom.

Modern technology can provide solutions to problems faced in pandemics but cannot change the human element. Therefore, it is important that we consider the rights protected and those transgressed before reaching final decisions, and important to avoid further transgression. We wish to illustrate this point with a few examples, which also serve to show the role of common sense. The original solid wood doors to our isolation rooms were replaced by doors with large windows to allow visual contact and curtains to allow privacy. Telephones and televisions were supplied in the rooms, and a primary infection control nurse was available 24 h/day. These are examples of respect for individual rights, which become highly important.

Summary
In some countries, one or more clinical ethicists or medicolegal experts serve every hospital. Ethics consultations to assist clinicians are becoming more common and have been shown to reduce length of stay and procedures in intensive care units. Furthermore, publications from Canada, which coped with the SARS epidemic in large numbers, reveal that their organization included both ethical and psychological support teams. An article in JAMA examined the ethical and legal challenges posed by SARS. In a bulletin of the World Health Organization, the limitations of international law with regard to communicable diseases were emphasized. Infection control practitioners are directly involved with new infectious diseases and so should also be closely involved in developing the policies and the actions required to contain them. Had there been such involvement, it is uncertain whether our decisions would have been different or whether the decision-making process would have been more complex. We recommend the immediate availability of legal and ethical consultants in the field whose input could be utilised in times of stress by supporting the clinical staff in coping with ethical dilemmas. The Israeli Patient’s Rights Act requires the formation of an ethics committee in every hospital. Such a committee might have been useful in coping with the issues raised here. It is, however
for professionals to recognise the need for such consultations and to request the convening of the ethics committee when faced with similar issues.

References

1. Yin W, Wei-Nua P, Yuan-shi L. The lungs store the corporeal soul (PO), and its mind is worry. N Engl J Tradit Chin Med 2003;2:3–4.
2. Ministry of Health of Malaysia. Guidelines for the handling of dead bodies due to suspected/probable severe acute respiratory syndrome (SARS). Kuala Lumpur: Ministry of Health Malaysia; 2003.
3. Tzeng H-M. Fighting the SARS epidemic in Taiwan. A nursing perspective. J Nursing Administration 2003;33:565–567.
4. Loutfy MR, Wallington T, Rutledge T, et al. Hospital preparedness and SARS. Emerg Infect Dis 2004;10:771–776 [Available at: www.cdc.gov/eid, Accessed 02.06/2004].
5. Hsin DH-S, Macer DRJ. Heroes of SARS: professional roles and ethics of health care workers. J Infect 2004;49:210–215.
6. Nelson LJ. Ethics consultations reduce time and procedures in intensive care. Evid Based Health 2004;8:63–64.
7. Gostin L, Bayer R, Fairchild AL. Ethical and legal challenges posed by severe acute respiratory syndrome: implications for the control of severe infectious disease threats. JAMA 2003;290:3229–3238.
8. Aginam O. International law and communicable diseases. Bull World Health Organ 2002;80:946–951.
9. The Patient’s Rights Act. Jerusalem: Knesset Israel; 1996 (in Hebrew).