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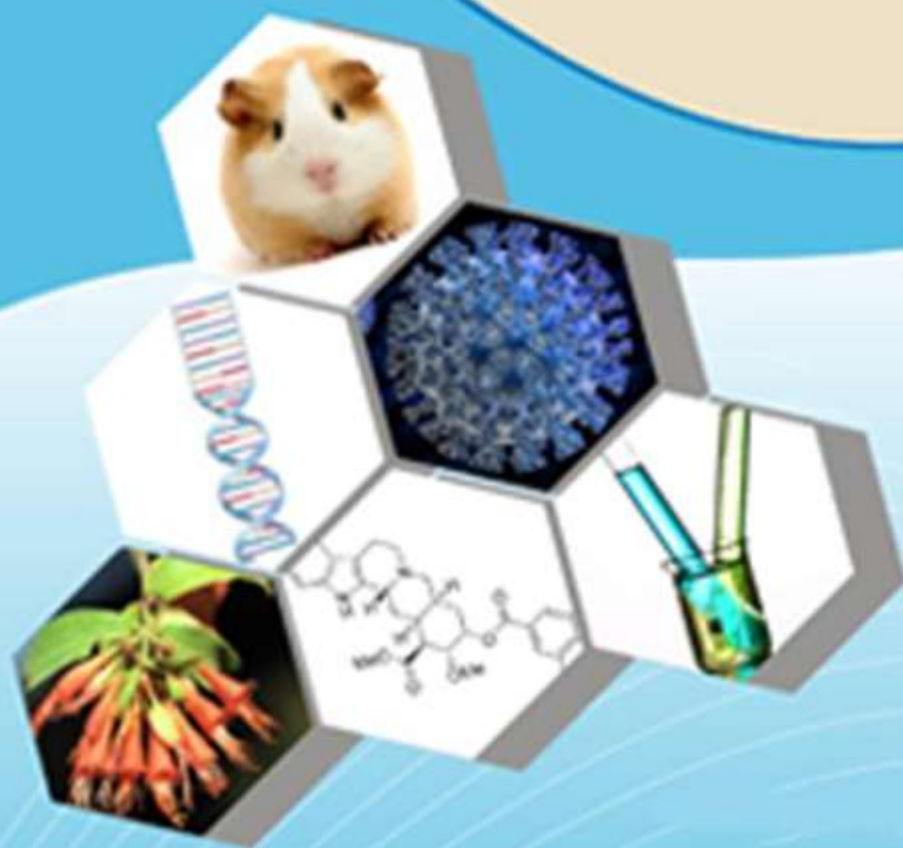

iajpb.editor@gmail.com
editor@iajpb.com

www.iajpb.com

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The Scope of pharmacy ethics—an evaluation of the international research literature,

C. Anusha, S. Md Abdulla , IVL. Padmini

Abstract

This paper attempts to provide a critical overview of international published discourse relating to ethical issues in pharmacy practice from 1990 to 2002. We found that there is little research literature specifically addressing ethics in pharmacy practice and almost none addressing fundamental philosophical issues or values for pharmacy ethics. There is no dedicated journal for pharmacy ethics. Most material relating to pharmacy ethics is articulated as codes or pronouncements from professional bodies, as opinion or reflection in textbooks and in debate such as letters and articles. However, this should not be taken to mean that pharmacy and ethics are strangers; simply that such matters are not frequently analysed in published pharmacy literature. The presumption is usually that most matters of pharmacy ethics are very familiar and require no exploration or explanation.

Where the research literature does target ethical issues, the most common method is to employ ''the scenario approach''. This term describes the technique of using a vignette or scenario from actual pharmacy practice and then exploring a variety of possible options to identify one or more defensible solutions. The vast majority of scenarios related to the delivery of healthcare per se; rather fewer derived from delivery of healthcare in a commercial environment. One notable exception to this approach is the body of work by Latif and colleagues on moral reasoning and community pharmacy practice.

Keywords: pharmacy ethics—an evaluation of the international

Introduction

Over the 20 years prior to 2002, pharmacists practis- ing in the health systems of the developed world have expanded their activities from a predominant emphasis on the supply of medicines to an increasingly clinical
and advisory role. Migration from compounding and provision of medicines has been a long-term process, (chronicled, for example, by Anderson, 2001) and is by no means complete. Policy directions, typified in England and Wales by the NHS Plan and Pharmacy in the Future (Department of Health 2000a, b), describe significant roles, principally for community pharmacists, in prescribing and the provision of prescribing advice, in assuming accountability for therapeutic outcomes and in contributing to patient care decisions within multi-

faced by other clinical colleagues but will also encounter particular challenges of their own. Moreover, the position of community pharmacists straddles both the public and private sectors: in the UK, for example, the pharmacist is, or is employed by, a private employer contracted to the NHS to dispense prescriptions—a public service. The pharmacist is also a private sector retailer of other medicines and other products, health- related or otherwise. Pharmacists working in the community daily experience patients as customers as well as patients receiving complex and sophisticated therapeutic regimens. Practising pharmacists need there- fore to be fully engaged with and competent to deal with ethical issues arising from the increasing challenges of ''hi-tech'' healthcare and its delivery in a business environment. This literature review aims to establish the scope and extent of the literature documenting such engagement.

Scope

Healthcare ethics encompasses a reasonably well-established spectrum of issues typified by the UK core curriculum for medical ethics (Consensus group of teachers of medical ethics and law in UK medical schools, 1998) and supported by original work in America by Beauchamp and Childress (2001) and classic texts on ethics in healthcare (Mason, McCall Smith, & Laurie, 1999; Seedhouse, 1998). Many issues arise from the relationships between healthcare professionals and patients, relatives and the general public. Others arise from the research and development process that under- pins healthcare or the constraints of balancing demand and costs, especially within state-funded systems. Healthcare ethics has traditionally related to patients within a healthcare system rather than to situations where the ''patient'' is, in reality, a fully autonomous consumer in the private sector—for example, a customer selecting their own non-prescription medicines. How- ever, social science contributions, for example, from Denzin and Mettlin (1968), Dingwall and Wilson (1995) and Hibbert, Bissell, and Ward (2002) have explored commercial and business influences on professionalism in community pharmacy.

Pharmacy practice is usually understood to describe those activities of pharmacists that most closely and directly impact on or interact with the final consumer of medicines, be they patients or users. The main practice areas are therefore within hospitals (17%), within community (or retail) pharmacies (62%) and in associa- tion with GP practice (perhaps 3%) (Hassell, Fisher, Nichols, & Shann, 2002). Pharmacy practice has the potential to raise ethical challenges across the full spectrum of healthcare ethics, although not always to

such an extent or to levels that may, for example, face medical or nursing practitioners, when negotiating the switching off of life support or terminating a pregnancy. Conversely, community pharmacists, being in the private sector, have daily to balance their obligations to make a living, nay a profit, with their professional duties as providers of advice and support to optimise the use of medicines. In addition, in Britain, national multiples operate roughly 40% of community pharma- cies so that the

values that might underpin pharmacy ethics. Instead, national and international professional organisations have largely defined the scope of pharmacy ethics through their official pronouncements and codes of ethics or conduct (for example, see website references for American Pharmaceutical Association, European Phar- macy Group, International Pharmacy Federation, Pharmaceutical Society of Ireland, Pharmacy Boards of Queensland or New South Wales, the Royal Pharmaceutical Society of Great Britain and the World Health Organisation).

organisational values and targets adopted by these companies (and countless small local groups) to secure adequate profits for shareholders or owners may have a powerful influence on the ability of individual pharmacists to exercise independent profes- sional judgement and morality.

This literature review identified two additional bodies of published material that were excluded because they are not directly relevant to pharmacy practice. They were, firstly, accounts of work in the teaching of pharmacy ethics. Since much of this work is intended to inform and support the moral awareness and reasoning capacity of future pharmacists, further evaluation of this material may be appropriate else- where. The second body of work describes the moral dilemmas surrounding the pharmaceutical industry, third world poverty and availability of medicines. As such, it was decided that this was outside the scope of the present review.

This review therefore concentrates on two areas of literature in which ethical challenges arise for practising pharmacists: those that arise from

* Delivery of healthcare per se and.
* Delivery of healthcare in a business environment.

Method

Details of the search strategy with selection and exclusion criteria appear in Appendix 1. Electronic databases were searched from 1st January 1990 to 1st July 2002. This period was selected to overlap with and extend material in two major British reviews (Pharmacy Practice Research Resource Centre, 1994a & b), to identify published discourse consequent on a new British Code of Ethics in 1992 and to span a sufficient period for tangible changes in the role of pharmacists to be evident.

Part One: Healthcare practice related issues

Philosophy

In terms of philosophical discourse, very little material has been published in journals on the core

Some US textbooks attempt discussion on ethical norms (Weinstein, 1996; Smith, Strauss, Baldwin, & Alberts, 1991); other UK textbooks (Appelbe & Wingfield, 2001; Mullan, 2000; Taylor & Harding, 2001), have sought to add brief commentary on the concepts of professional ethics and the operation of national codes of ethics. The current British Code of Ethics, (RPSGB, 2001), claims to be underpinned by

three key principles: beneficence, competence and integrity (Anon, 2001), although only the second of these terms actually appears in the text of the code. Also, at least in Britain, successive codes have included short preambles about duties or responsibilities of pharma- cists derived from discussions amongst leading practi- tioners or commentators in the profession, consultation with rank and file pharmacists and building from earlier versions of similar codes. That is not to say that these deliberations do not lead to principled statements of ethics; simply that the scope of the principles derive from practice rather than a philosophical analysis of core values in the profession.

Two American papers have both supported and criticised the effectiveness of pharmacy organisations in setting the core values of the pharmacy profession. A study by Garst and Berardo (2000) examined the role of the American Pharmaceutical Association in relation to changes in ethics and practice in pharmacy over the previous century and concluded that the Association had been a stabilizing social structure to stimulate debate and disseminate new ideas and standards. A much less comfortable view was taken by Redman (1995) who, whilst congratulating the Society of Health System Pharmacists on their innovative work in tackling ‘‘drug misadventuring’’, challenged pharmacy as a whole to demonstrate the ‘‘ethics of leadership’’ in coping with the ‘‘hurricane of change’’ surrounding the transformation of pharmacy into a fully clinical discipline. Citing work by Americans Pellegrino and Thomasma (1993) on medicine as a moral community, she questioned why there was virtually no collaboration between the three professions—nursing, medicine and pharmacy—to develop a cross-professional conception of ethics. International work in this direction did commence with the Tavistock Group, (Smith, Hiatt, & Berwick, 1999; Berwick, Davidoff, Hiatt, & Smith, 2001)but the outcomes were mostly concerned with economic and resource constraints in health systems and the balancing of interests of health professionals, organisa- tions, managers and the public rather than developing a universal code of ethics by which health professionals should organise their work. Nevertheless, the group made the telling point, as did Redman (above) that all healthcare providers should be brought together in a consistent moral framework. Such a philosophy may not recognise that core values such as equity and equality of access which underpin the British NHS or any publicly funded health service are not necessarily reflected in the private sector.

A paper by a Dutch pharmacist (Dessing, 2000) attempts a philosophical analysis of the application of ethics to pharmacy practice. Dessing postulates three fundamental principles—autonomy, democracy and solidarity—as being the basis for ethical pharmaceutical care. Drawing on the views of Rorty (1989), Dessing says that the latter two principles are necessary for the avoidance of anarchy that would result if personal autonomy were always unopposed. Dessing goes on to recognise that therapy, in this case medicinal treatment, should always be viewed as an ethical endeavour aimed at restoring the recipient to the maximum possible degree of autonomy. Dessing stresses the importance of developing a relationship with the patient as being the crucial precursor to an ethical obligation towards them. From this position there flows the imperative of non- maleficence (limiting harm) in therapy and the concepts of informed consent and participation (concordance) in drugs treatment. Dessing also criticises the FIP (Inter- national Pharmaceutical Federation) Code for stating lofty principles in places and providing very limited, specific practical guidance in others: e.g. ‘‘the pharma- cist (shall show) respect for human lifey.’’ and will ensure that ‘‘when a pharmacy closes, the patients are informed of the pharmacy to which their records have been transferred’’.

Published work examining pharmacy ethics from a philosophical perspective is relatively scarce; literature documenting the application of specific ethical concepts to pharmacy practice is more widespread and the following account gives examples only of typical papersin each area.

Application of ethical concepts to practice

By far the most common example of literature covering pharmacy ethics assumes that pharmacists have knowledge of ethical norms and moves straight to application of ethical (and legal) principles to scenarios from pharmacy practice. In the UK Nathan and Grimwade (1993) undertook an early form with eight scenarios ‘‘to test y law and ethics knowledge’’; in truth, all but one raised questions of law rather than ethics and even the eighth, on confidentiality of contraceptive prescribing, defended the ‘‘answer’’ prin- cipally by reference to data protection and other legislation. The Weinstein and Smith textbooks (see above) provide examples of ‘‘practice scenarios’’ (in- cluding business related dilemmas) where it is necessary first to identify the questions of ethics that arise in a given situation before being in a position to deal with them. In the UK, Wingfield, Taylor, and Lee (1997) and later Appelbe, Wingfield, and Taylor (2002) proposed the application of a systematic ‘‘stepwise’’ approach to decision making in practice situations where legal and ethical principles may conflict. (This can be summarised as: gathering facts, identifying issues, assigning priorities and interests, generating options for action and choos- ing an option as a reasoned decision.)

Two papers in the American Journal of Hospital Pharmacy appear at first sight to be simply scenario based but in fact include philosophical analysis of the schools of thought at work in the opposing ‘‘solutions’’ suggested by each of two commentators. In a case in which the pharmacist has to question the motives behind a change in physician prescribing,

Veatch (1990) advances deontological and utilitarian arguments in support of the two options, before concluding that duties such as the ''ethics of respect'' for the patient's rights should probably prevail. In 1993, referring to a patient who does not wish to disclose serious symptoms to his physician, Veatch (1993) also contrasts older paternalistic models of confidentiality with more mod- ern thinking on respect for autonomy.

The following sections exemplify illustrations of ethical principles as applied to pharmacy practice, often within papers that did not set out specifically to examineethical questions.

Consent and confidentiality

The most frequent literature citation in pharmacy ethics is confidentiality, and the associated concept of consent to use and disclosure of patient information. A French study (Auguste, Guerin, & Hazebroucq, 1997) investigated the reactions of 15 hospital pharmacists to situations that might compromise confidentiality. All the pharmacists in the study contended that, in their undergraduate studies, they had received no training in biomedical ethics and insufficient exposure to practice to feel confident of their ability to deal competently with these situations. Resort to a guide to good practice was seen as the main solution. The same shortcomings, and solution, were features of a later UK study (Wills, Brown, & Astbury, 2002) into the dilemmas faced by medicines information pharmacists. Having tradition- ally confined their telephone service to other health professionals, such services are increasingly beingaccessed by the public. The study reported conflicts between those pharmacists who prefer to withhold sensitive information for more propitious disclosure than by phone and others who argue that as most of the information sought is in the public domain, it should be available on request. Again, of 151 centres for medicine information which responded, over half said the pharmacists providing the service had received no training in ''ethical issues'' despite the fact that over 70% of them had gained postgraduate clinical qualifications.

Other published material on consent and confidenti- ality uses the ''scenario and possible solutions'' ap- proach described above. In the US, Haddad (1993) discussed a situation in which a patient had disclosed information that suggested a serious threat to his health with a strict injunction not to share it with the patient's physician. She suggests that the duty of confidentiality rests on two fundamental ethical concepts: respect for the patient's autonomy to decide what happens to them, and fidelity, implicit in an unspoken pledge by the pharmacist to keep silent, if the patient wishes. In this case, the deciding factor is held to be that articulated wish. If the patient had said nothing, disclosure might have been an alternative option. In the UK, in a series ofscenario discussions, Daly and Bower (1997a and b) included other examples of information provided by the patient to the pharmacist on a confidential basis, such as deliberate refusal to take the prescribed medication or withholding information that could compromise the effectiveness of medication. In a series analysing the process of ethical decision making, the present author (Wingfield et al., 1997, cited above) included a confidentiality scenario about disclosure of patientrecords after death to illustrate the overarching natureof ethical obligations beyond statutory law. Other articles have adopted a more descriptive approach by documenting the implications for confidentiality of changes in practice (Justice, 1997 USA) or a change in the Code of Ethics (Rodgers, 2000 UK). One further article (Sheu, 1998 USA) examines the practical ways in which both security and privacy can be assured with the use of a telephone link and a buffer zone to distance waiting patients from the patient consultation in progress.

The advent of electronic communication has gener- ated the largest amount of literature about pharmacy and confidentiality. On both sides of the Atlantic, there has been an explosion in statutory regulation to be described (Wingfield, 2000a, b; Tribble, 2001; Nahra & Ryland, 2001) and much comment on how to cope with the opportunities and threats that ''telepharmacy'' provides (Angaran, 1999). The acquisition of electronic patient medication records provides opportunities for ''data mining'' by pharmaceutical companies in an effortto target their drug promotion activities more efficiently and profitably. In the UK, the state took a hand in attempting to outlaw this activity claiming that it would drive up drug costs to be borne by the taxpayer (Anon, 1999). The state lost, principally because the data processor could show that the patient identity was effectively removed (Anon, 2000). In Canada, similar activity by the same data processor evoked a call for regulation by the Medical Association to protect physician confidentiality (Zoutman, Ford, & Bassili, 2000). Reference is made in this paper to the unilateral action by British Columbia to prohibit the participation of pharmacies in the collection of this data and substituted a province-wide, on-line pharmacy system instead. Ironically, the NHS in the UK already has such data within its state reimbursement systems but does notyet choose to use it in this way.

The capacity to create and transmit electronic prescriptions is in its infancy in the UK but early research (Porteous, Robertson, Bond, Hannaford, & Reiter, 2000) suggests that confidentiality and consent will be contentious issues. The ability to process personal health information within state systems such as the UK NHS or employment linked Patient Benefit Organisations in the US provides real and potential opportunities to manage drug costs or improve patient health outcomes. Such opportunities

also raise conflicts between organisational efficiency and patients' rights to withhold consent to such manipulation of their data.These rights are likely to be more about a right to be properly informed than a right to opt-out. In 1998, a media outcry followed a US scheme that used prescrip- tion information to promote a new drug to patients without their prior consent (O'Harrow, 1998 a and b). In an editorial discussing this development, Talley (1998) draws attention to earlier acknowledgement by Zellmer (1994) that the interests of pharmacy providers such as owners of businesses or Pharmacy Benefit Managers (PBMs) might be different from those of pharmacy practitioners. Pomerantz (1999) and Ohliger (1999) highlighted the threat to privacy inherent in collections of data being accessible to large numbers of employees in behavioural (mental) health PBMs. Lo and Alpers (2000), in a paper addressed to the Canadian medical profession, suggest that use of patient data in PBMs should be subject to clear evidence of patient benefit, independent scrutiny and patient authorisation, with such authorisation a necessary condition for continuing care.

Internet pharmacies continue to grow globally. Most comment focuses on the commercial implications for more traditional ''bricks and mortar'' pharmacies but the implications of privacy and confidentiality of email communications are described in a US news item by Landis (1999) and discussed by Spooner (1999). The formulation of operational and ethical standards for on- line supply of medicines has been undertaken by professional organisations in Britain and Europe (Anon, 1997; FIP, 2002). Electronic communications may help community pharmacists in particular to integrate with the wider healthcare team; conversely, the vast capacity and capability of electronic communication means that pharmacists must ensure they possess a clear and thorough understanding of privacy and confidentiality aspects of sensitive personal data and implement rigorous measures to preserve them.

Other consent issues

In the lexicon of health care ethics, consent has traditionally related to consent to treatment. For pharmacists however, the usual context is within clinical trials either at industry level or within a hospital setting (Kayne, 1996) although the present author (Wingfield & Gibb, 2001) has raised questions about the limitations of applying the traditional research governance mechan- isms to randomised controlled trials with autonomous customers in a community pharmacy setting. The extension of consent to participation in practice research, and the corresponding role of research ethics committees in the UK has been described by Jesson (1997) and Smith (1998). Raynor, Petty, Lowe, and Vail (2000) have published some early research on the reluctance of patients to consent to medication re- view—a key component of the pharmacist's expanding role. Once again, the scenario-solution approach has included an example where the pharmacist discovers an inadequately informed patient in a clinical trial being conducted by the district nurse at home (Daly & Bower, 1997c). Boggs and Daly (1998) also highlight the need for greater recognition of patient consent to treatment with unlicensed medication or ''off-licence or off-label'' indications. Conroy et al. (2000) found almost 50% of drug prescriptions in European countries were either unlicensed or off-label. Subsequent correspondence from Andrew, Riordan, Ruperto, and Martini (2000) and others pointed out that such use was by no means limited to hospital wards.

A thoughtful exposition of the concept of consent in a pharmacy context appears in a paper by Americans Wick and Zanni (2001). They argue that ''pharmacists have a professional obligation to counsel so that their patients are, in effect, informed co-managers of their drug therapy''. This approach (called ''concordance'' in the UK) is a logical extension of the theoretical approach taken by Dessing (above). The ethical rationale of medical treatment is to restore as far as possible patient autonomy. Partnership by patients in therapeutic decisions requires that they have both knowledge and understanding of their treatment and options; the pharmacist should accept accountability for ensuring that such informed consent to treatment is achieved, or at least offered. More work may be needed firstly to ensure that new and practising pharmacists are thoroughly instructed in the concepts of consent and confidentiality; secondly to research best practice in securing concordance.

The beginning and end of life

Pharmacists are rarely front line health practitioners at moments of birth or death but they may be the suppliers of medicines used in these circumstances. Reservations amongst UK pharmacists (and general practitioners) about the supply of emergency hormonal contraception (EHC) (Harper & Barrett, 1998; Barrett & Harper, 2000) diminished considerably when a proges- togen only form of EHC with a low risk profile was introduced as an over-the-counter pharmacy only medicine and legally sanctioned, locally agreed direc- tions were instituted allowing participating pharmacists to exercise to the full their professional judgement as to the suitability of supply outside the licence. Bissell and Anderson (2003) found that community pharmacists supplying EHC via a prescribing protocol had few ethical objections to this role.

Regarding ''hastened death'', an international series of papers published in the mid 1990s attempted to identify issues for pharmacists as the agents of supply for life-terminating medications. From the US, Rupp (1995) suggests a need for a ''conscience clause'' protection for those pharmacists who did not wish to be involved. McAuley, Smith, and Szeinbach (1996) report research on the views of American hospice pharmacists in

withholding or withdrawing life-sustain- ing medications. Marcus (1995) discusses the response of pharmacists to the Oregon Death with Dignity Act and highlights the lack of recognition of ethical challenges for pharmacists in the framing and passing of this law. In other American studies, Rupp and Isenhower (1994) undertook work on the views of pharmacists towards physician-assisted suicide (PAS) establishing that, although over 70% of pharmacists believed that patients were sometimes justified in wanting to end their own lives, fewer than half supported the concept of PAS. Commentators from Northern Ireland and the US (Mullan, Allen, & Brushwood, 1996) described the supervening ethical dilemma in this area: conflicts between personal convictions of pharmacists as employ- ees and the policies and customer expectations of their employing organisation. Monsanto, Fabregas, and Velez (1999) surveyed the adoption of a conscience clause by professional associations and boards across the United States. In a Canadian paper on terminal sedation, Tisdale and Woloschuk (1999) drew careful distinction between this and PAS. They distinguished between, in terminal sedation, the continuing obligation to monitor the patient's ''progress'' and ensure that suffering does not recur with PAS, is likely to be technically easy and brief. They argue that the ethical imperatives of beneficence and non-maleficence could still be satisfied because terminal sedation is intended to maintain a satisfactory quality of life until the moment of death, not to hasten death.

A study in Britain (Hanlon, Weiss, & Rees, 2000) aimed to establish if British pharmacists had differing views from those in the Rupp studies. By and large they did not, with 38% not feeling the need to be informed about the purpose of the medication in these instances and 25% positively wanting to be kept in the dark. The present author drew attention to this rather disappoint- ing flight from involvement (Wingfield, 2000a, b) and (Hackett & Francis, 2001) noted that this reluctance seemed to be more marked in community pharmacists. They suggested that this might be due largely to their relative isolation and lack of opportunity to discuss issues with colleagues. It might also reflect the diminu- tion of ethical reasoning skills in pharmacists working in retail settings as extensively researched in the USA by Latif (see below).

In the Netherlands, the state has already legalised euthanasia, albeit subject to a number of conditions. A paper by Lau, Riezbos, Abas, Porsius, and De Boer (2000) reported on a survey undertaken in 1994 on the views of pharmacists. Naafs (2001) comments further on the Dutch findings and argues that for pharmacists to assist in legalised euthanasia is a logical last step to alleviate suffering. Another perspective from Hirsch, Marriott, Wilson, and Faull (2001) highlighted the ethical dilemmas around clinical trials in palliative care and again reflects on the role of research ethics committees.

Part two: Business related issues

A fundamental dilemma, which goes to the heart of the position of community pharmacists, is whether they are health professionals or retailers in their community pharmacies or ''chemists' shops''. This conflict has long been identified (Quinney, 1964; Denzin & Mettlin, 1968; Ladinsky, 1971; Kronus, 1975) and may have implica- tions for the quality of care that can be delivered from community pharmacies and for the adoption of more clinically orientated roles in patient care, such as structured advice, management of repeat dispensing, supplementary prescribing and medicines management. The frequent, often daily, experience of such conflicts may affect the professional satisfaction and moral reasoning skills of pharmacists who work in this sector as well as the nature of their engagement with a broader ethics agenda than that solely associated with the provision of healthcare.

Dingwall and Watson (2002) have undertaken pre- liminary work in England to inform a full-scale investigation of the social and economic position of solo practitioners (usually owner-proprietors) in community pharmacy. They suggest that many of the economic pressures of solo practice identified lead directly to ethical dilemmas. Increased consumerism, the loss of resale price maintenance (price fixing on OTC medicines), pressure to ''violate ethical and professional norms'' to stay in business—all contribute to a feeling of ''ethical loneliness''. They found that there was a clear cultural gap between the thinking of NHS planners, civil servants and the entrepreneurial spirit of the solo professional, and that the policies of government and professional body policies ''simply fail to engage with the circumstances of many solo practitioners''.

Moral reasoning and professional independence

A prolific researcher in this field is Latif, who has undertaken many studies involving community pharma- cies in USA. In all, 18 citations of his work were identified; nine of these have been directed at progress in learning and teaching before qualification. The remain- ing nine are outlined below and represent a burgeoning body of empirical research into the moral reasoning skills of community-based pharmacists.

Latif's first identified paper (1997 with Berger) reported on work with pharmacy students in one School of Pharmacy and a random sample of community pharmacists in a South East US city. The aim was to examine their moral reasoning using Rest's Defining Issues Test (DIT). In a comprehensive introduction, Latif sets out the genesis of this test, from its origins by Piaget (1932) and by Kohlberg (1969) leading to its ultimate formulation by Rest (1979, 1990). Briefly, the DIT is a self-administered questionnaire that measures the subjects' moral reasoning according to cognitive developmental theories. It consists of six hypothetical dilemmas (a short-form version comprises three dilem- mas). Each dilemma is followed by a series of 12 statements

about each dilemma. For each dilemma, subjects must select and rank order those issues that have, in their opinion, the most significant effect on the dilemma's resolution. The four highest ranked items are included in scoring the DIT. Of these four items, only those that represent principled thinking are included in the ''score''. These scores can then be compared across a range of subjects both within pharmacy and other professions. The DIT test can be administered in a range of settings controlled for organisational values and rewards systems.

Latif and Berger (1997) in their study have applied the DIT test to the work of nurses, physicians, physiothera- pists and surgeons. He found that the DIT scores of 42.47 in first year students are similar to the mean for college students (42.3) and for adults in general (40.0). However, it is less than the obtained means for other health profession student groups such as medical students (50.2) and dental students (47.6). Moreover, the score for the community pharmacist group was 36.4 which compares unfavourably with other professional groups, such as practising physicians (49.2) and staff nurses (46.3). He concludes that, ''if the community pharmacy setting does in fact impede moral develop- ment, then pharmacy organisational climates and cultures must be changed if we expect to foster the ethical covenant between the patients and the pharma- cist that is required to provide pharmaceutical care''.

In subsequent years, using larger samples of data from the US, Latif has gone on to identify situational factors which affect the decision making behaviour of commu- nity pharmacists. Latif (1998a) published a survey of 450 independent and chain pharmacists in a large South Eastern USA city indicating that workload did not significantly affect clinical decision making but employ- er's approval or disapproval of the provision of pharmaceutical care were highly significant. Based on this finding, he suggested that the effect of the organisational culture within the organisation employ- ing the pharmacist should be more widely researched. In the same year Latif et al. (1998) published results from the use of Rest's defining issues test (DIT) in the same population. These suggested that, after controlling for situational factors, pharmacists' moral reasoning ac- counted for a significant amount of the variation associated with their self-reported and actual clinical performance. In the third paper that year Latif (1998b) proposed that the study of patient care by community pharmacists would be incomplete without considering the effect of reward system within the employing pharmacy organisation and the ethical cognition level of the pharmacist. This paper set out a future research agenda of hypotheses to be tested, all referring to Kohlberg's six stage of morality:

* That most community pharmacists reason at con- ventional levels of cognitive moral reasoning (Kohl- berg's levels 3 and 4).
* That those pharmacists at higher levels (Kohlberg's levels 5 and 6) would deliver more consistent patient care judgement and behaviour.
* That systems which reward or emphasise prescription volume over patient care will reduce consistency amongst community pharmacists at lower (Kohl- berg's levels 1–4) levels.
* That community pharmacists at lower levels will be more influenced by significant others, and by the organisation's reward system, than those at the higher levels.
* That if excessive organisational pressure rewards volume over patient care, those pharmacists with higher levels will leave the organisation.

Latif (2000a) has since published findings (again with community pharmacists in a South East US city) that confirm that pharmacists' moral reasoning accounted for a significant amount of the variance associated with their clinical performance. Moreover, that those phar- macists with higher levels of moral reasoning were significantly more likely to score low on social desir- ability—defined as ''a tendency to provide a socially desirable response that overstates actual behaviour''. In the same year, Latif (2000b) reported on further studies which found that the DIT scores for community pharmacy practitioners were lower than for practising physicians and for medical, dental and pharmacy students. He suggested three factors might be at work: the selection of lower ethical reasoners to the community pharmacy setting, the exodus to other pharmacy settings of higher reasoners and a possible retrogression in the ethical cognition of community practitioners. Further work has focused on the effect of age and tenure on moral reasoning scores Latif (2000c), differences be- tween moral reasoning scores in pharmacists working in chain and independent pharmacies (Latif, 2000d) and a model for community pharmacists to adopt to cope with the impact of managed care and Pharmacy Benefit Management companies (Latif, 2000e).

Business conflicts: healthcare goals Versus business goals

Health services such as instalment supply, supervised supply, needle and syringe supply and disposal of ''used works'' for drug misusers, when provided from com- munity pharmacy premises, raise conflicts beyond whether they are ''right'' or not. Such activities can directly conflict with demands of the business environ- ment. In the UK, Harding, Smith, and Taylor (1992) studied the attitudes of (only) community pharmacists to these services. Whilst some objections reflected value judgements about expending valuable time on misusers, most reflected the constraints of healthcare in a retail environment—the potential to deter other customers, a perceived negative effect on other customers, the likelihood of

shoplifting, unpleasantness for counter staff and customers. Other objections reflected conflict with business imperatives—there was no long-term financial benefit to participation. A similar UK study with pharmacy students, at undergraduate and pre-registration stages (Sheridan & Barber, 1993) confirmed suggestions that younger pharmacists were likely to adopt the most non-judgemental approach to drug abusers, with support for the statement that ‘‘pharma- cists should deal with all aspects of healthcare’’. However, Tucker (1997), found that a significant objection to participating in these voluntary services remained the possibility of adverse effects on the regular customer base.

Rees, Harding, and Taylor (1997) identified a key business-related complication. Most pharmacists, other than those who are owner-proprietors do not have autonomy in making decisions about service provision. Thus the decision as to whether to participate is in fact taken by managers, often very senior, and sometimes not pharmacists themselves. Matheson and Bond (1999) undertook further qualitative analysis of Scottish com- munity pharmacists' views and identified a concern about the sheer numbers of supplies and exchanges for drug abusers as well as maintaining a welcoming environment for other shoppers.

These papers demonstrate that whilst the convenience and informality of a pharmacy ‘‘shop’’ may seem to be appropriate to the management of drug misusers in the community, success is limited by the need to remain attractive to other shoppers and to fit within corporate brand strategies and environments.

The same commercial conflicts arise with the optional supply of EHC outside its licence under local directions (see above). A British report (Anon, 2002) describes pressure from pro-life groups that led a national chain of supermarket pharmacies to abandon EHC supply via patient group directions which allow discretionary supply to females under 16 and some vilification in the pages of the pharmaceutical press (Gray and O'Brien, 2002; Atkinson, 2002; Bowyer, 2002). Whilst a decision to supply or not supply may be a matter of personal conscience and personal business interests for an independent owner-proprietor, participation by larger national pharmacy chains is a decision taken by senior executives, acutely aware of how boycotts and demon- strations threaten share prices and the prosperity of retailing activities wholly unrelated to healthcare.

Other business conflicts arise from the provision of what may be regarded by many as simple commodities from a healthcare setting. Resnik, Ranelli, and Resnik (2000) examined the impact of the USA business environment and the time available to meet a legal requirement to provide individual advice to each and every customer and patient. Two researchers from Iceland and Denmark (Almarsdottir & Morgall, 1999; Almarsdottir, Morgall, & Grimsson, 2001) examined the effect of removal of all price fixing for medicines and the introduction of licensing and quality audit for pharma- cies in Iceland since 1996. One unwanted outcome was that, at least in the cities, patients and customers were found to ‘‘shop around’’ avidly for discounts, making the proper use of patient medication records or any other monitoring of patient progress next to impossible. Prayle and Brazier (1998) published a UK paper examining ethical aspects of deregulating medicines from prescription control to OTC. They examined the ethical implications of enhancing access from the perspective of patients, the impact on the legal and ethical responsibilities of community pharmacists and considered whose interests really benefit from deregula- tion. They concluded that beneficence becomes difficult to deliver when pharmacists, or their assistants, simply ‘‘supply the product that customers, aided by manufac- turers' advertising agents, have determined they desire''. Hibbert et al. (2002 see above) noted that pharmacists and their staff have sought to formalise their involve- ment in the surveillance of medicine sales through the use of questioning protocols; they also document how these strategies rapidly become ineffectual with ‘‘smart consumers’’.

Such considerations are germane when considering the misuse of OTC medicines such as codeine linctus, certain proprietary cough mixtures, laxatives and anti-histamines. In Britain, the Royal Pharmaceutical Society (2002) stated that pharmacists have a professional duty to intervene and few have challenged this obligation, only how it should be discharged. Work in Northern Ireland by Hughes, McElnay, Hughes, and McKenna (1999) has attempted to quantify the nature and frequency of OTC medicine abuse, and what measures pharmacists take to limit the incidence. By far the most common strategy is to remove the offending product from display, thus necessitating a special request for its supply and the opportunity to enquire about its use, refuse it or, as the author can testify, assert that ‘‘it is out of stock’’; a strategy still apparent in research by MacFadyen, Eadie, and McGowan (2001). Not a victory for truth-telling perhaps, but a pragmatic solution, well understood by regular misusers, which often avoids a potentially confrontational situation. The researchers found that pharmacists were nevertheless willing to consider several more professional options such as referral to the general practitioner, referral to a substance misuse treatment centre or enrolment in a harm-reduction programme for such misusers. The same researchers reported on a pilot study for such options several years on (Fleming, McElnay, & Hughes, 2001). Matheson, Bond, and Pitcairn (2002) also researched the incidence of OTC abuse in Scotland and found that the pharmacist's role still seemed to be one of professional policing of OTC medicines.

A recent Scottish study (Kennedy & Moody, 2000) elaborated on factors which affect selection of OTC medicines. Finding that proprietors are more likely to be influenced by economic factors than employees, they concluded that such pressures were not excessive and might only involve the selling of a branded

product rather than an unbranded product which was never- theless appropriate for the consumer. They did not point out, however, that an employee pharmacist generally has no control over the inventory of medicines being stocked in the first place. As we have seen with participation in services to drug misusers (above), this choice is usually exercised at senior management level and, in the case of stock inventory, rarely by pharmacists.

Brown and DiFranza (1992) surveyed the incidence and attitudes of pharmacists in the USA to selling cigarettes. They found that 95% stocked tobacco products and 81% were willing to illegally sell cigarettes to underage buyers. Some were also happy to stock ''candy tobacco'' such as sugar cigarettes and display advertisements which were said to foster tobacco use among teenagers. Bentley, Branahan, McCaffrey, Gar- ner, and Smith (1998) found that around half of the respondents were still selling tobacco despite clear statements from professional bodies that such sales were incompatible with the ethics of the profession. Once again, this study highlighted the role of ''higher management'' in sustaining this position although many independent pharmacies also continued to sell tobacco, presumably of their own volition.

Discussion

This review suggests that examination of published and refereed papers alone on pharmacy ethics may provide too narrow a view of its scope and too limited an impression of the extent to which ethical issues are encountered in practice. A more comprehensive picture appears using appropriate references to articles, news features, letters and other informal publications, as we have done in this review. Some citations in this review indicated work that may have been undertaken within associations or at conferences of special interest pharmacists—in academia, in hospital practice, in palliative care, in mental health or paediatric special- ties—but had not led to full peer-reviewed papers. None of this invalidates the classifications set out in the body of this review since the intention was only to identify the scope rather than undertake an exhaus- tive examination of published discourse. Nevertheless, some areas of ''classical'' healthcare ethics such as research governance, resource allocation, and the ethical aspects of advances in pharmacogenomics do not yet figure in the published deliberations of practising pharmacists.

There is a Journal of Medical Ethics and a Journal of Nursing Ethics, but no dedicated journal for pharmacy ethics. Since little research in pharmacy has specifically targeted ethical issues then it is necessary to trawl a wide range of generalist and specialist practice research journals to obtain a picture of the scope of pharmacy ethics. One interpretation of this finding might suggest that in pharmacy, ethics is so integrated and intrinsic to daily practice that there is no need to single ethical issues out for special attention. Certainly, many citations found in the search process flagged key words such as ''consent'' in pharmacy practice research papers but did not, in fact, explore consent at all. Consent was simply a precursor to research that involved patients. Whether or not such consent was properly valid—from individuals with full capacity, information and understanding of what they were actually consenting to—was not examined. This may imply that these matters are too commonplace to require elaboration.

A less positive interpretation may be that obtaining consent is not identified as an ethical issue. As was seen in the introduction, pharmacists have traditionally been told what their ethics should be in Codes and pronouncements from their professional bodies. They have not customarily been schooled in a principled approach to ethics but rather have been provided with detailed guidance on what behaviour will be regarded as ethical in a given set of circumstances. The limitations of this approach are obvious when new practice is developed. Cribb and Barber (1998), in a discussion paper, characterised this situation as a need for greater ''value literacy'' in pharmacy. They defined value literacy as ''an awareness of, interest in and capability in identifying, discussing and handling value and ethical issues in pharmacy''. Such value literacy, they assert, is necessary for pharmacists to play a full part in addressing dilemmas in health policy, in respecting users' cultural scepticism or religious beliefs, to deal with the growth of institutional and personal accountability for healthcare and the blurring of boundaries across differing health professional roles.

If the literature on traditional healthcare ethics and pharmacy is sparse and diffuse, that covering the impact of business imperatives on ethics in community practice is positively rare. An obligation to make a profit to stay in existence seems likely to have some effect on the capacity of community pharmacists to act as indepen- dent ethical practitioners. Taylor and Carter (2002) state that of active pharmacists working in community practice, around half now work as self-employed locums. No work appears to have been undertaken to explore the differing impact on ethical behaviour amongst pharmacists who own their own businesses, those who occupy managerial positions or junior employee positions in large multiple chain pharmacies (as predominate in the UK) or those who work as a ''hired gun'' for a wide variety of businesses large or

small. Nor indeed, is there research on the role and influence of non-pharmacists in the management of ethical positions adopted in corporate pharmacy such as participation in certain services or the choice of goods tostock. Latif's work does expose the pressures of organisational values and reward systems (which them- selves often reflect a consumer culture and remuneration within a state health system) on the consistency and quality of care in community pharmacies. Latif's work is however confined to the USA with a predominantly insurance based health system; would the same levels of moral reasoning obtain in community pharmacists working in other countries within other systems? The employment trends now apparent in Britain at least (Hassell et al., 2002, cited above) suggest that research in

this area might assist employers and government alike in addressing those drivers which negatively affect the motivation and quality of care provided in community pharmacists.

Although deemed outside the scope of this review of ethics in pharmacy practice, papers cited from educa- tional journals were found that attempted to extrapolate backwards, as it were, from ethical challenges in practice to inform the content and delivery of undergraduate pharmacy courses. A greater willingness by practising pharmacists to publish accounts of actual dilemmas they encounter and to invite debate on how they could or should be resolved might facilitate the teaching of a principled approach to ethics. More effort could perhaps be made by pharmacy practice researchers to be alert to and aware of the ethical issues surrounding their work, and for them to consider the educational potential of their findings in raising such awareness amongst present and future pharmacy practitioners.

Conclusion

Pharmacists in practice do encounter a number of ethical challenges. Most of these may be dealt with a limited foundation in moral philosophy and exposure to dilemmas in the course of training. Whilst it may be argued that many pharmacists appear to tackle such situations pragmatically, using prior experience and common sense, more clinically oriented practice and an increasingly competitive retailing environment may mean that ethical challenges are likely to become more daunting and more likely to be disputed. There is a need for the knowledge base in pharmacy ethics to be systematised and integrated into the wider scheme of general healthcare ethics and for deeper and more open analysis of the conflicts that arise from the commercial context of practice in community pharmacy. These tensions will rise unless community based pharmacy services become part of the state health service or limits are set to define what activities in community pharmacies are purely retail transactions requiring no additionalprofessional input.

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