

The assumptions of ethical rationing: An unreasonable man's response to Magelssen et al.

Michael Loughlin

Abstract

Contributors to the debate on ethical rationing bring with them assumptions about the proper role of moral theories in practical discourse, which seem reasonable, realistic and pragmatic. These assumptions function to define the remit of bioethical discourse and to determine conceptions of proper methodology and causal reasoning in the area. However well intentioned, the desire to be realistic in this sense may lead us to judge the adequacy of a theory precisely with reference to its ability to deliver apparently determinate answers to questions that strike most practitioners and patients as morally arbitrary. By providing ethical solutions that work given the world as it is, work in clinical ethics may serve to endorse or protect from scrutiny the very structures that need to change if real moral progress is to be possible. Such work can help to foster the illusion that fundamentally arbitrary decisions are 'grounded' in objective, impartial reasoning, bestowing academic credibility on policies and processes, making it subsequently harder for others to criticise those processes. As theorists, we need to reflect on our political role and how best to foster virtuous, critical practice, if we are to avoid making contributions to the debate that not only do no good, but may even be harmful. A recent debate in this journal illustrates these issues effectively.

Keywords

Bedside rationing, clinical ethics, bioethical methodology, critical practice, virtue, priority-setting, politics, social progress, causal reasoning/responsibility, justice

The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore, all progress depends on the unreasonable man.¹

All questions contain assumptions: this is uncontroversial. If we ask a particular British celebrity whether or not he has stopped abusing children then we risk being sued, as our question logically presupposes that he once abused children. The more complicated or nuanced the question, the more difficult it may be to spell out its assumptions. Clinical bioethicists will agree that the sort of questions they ask about how to ration 'realistically' and 'ethically' contain assumptions, but may regard those assumptions as reasonable, because they reflect the realities of the health care systems and practices they aim to affect.^{2,3}

I have argued that academics, including economists and moral philosophers, need to identify, and subject to careful critical scrutiny, their own assumptions when they theorise about such practices.⁴⁻⁶ Our goal may

be to provide methods of argument or analysis to improve the decision-making processes that determine practice. But in the real contexts we aim to affect, our work may fail to do any positive good, and may even be harmful (Loughlin,⁴ p.158). In some cases, the attempt to 'solve' a particular problem 'ethically' may serve to endorse or protect from scrutiny the very structures that need to change if real moral progress is to be possible; unchallenged (because apparently reasonable) assumptions can function to distort the process of moral reasoning, thereby discouraging virtuous and critical practice.⁴ By providing certain 'realistic' solutions to practical problems, meaning ones that work

Department of Interdisciplinary Studies, Manchester Metropolitan University, UK

Corresponding author:

Michael Loughlin, Department of Interdisciplinary Studies, Manchester Metropolitan University, Crewe Green Road, Crewe, Cheshire CW1 5DU, UK.

Email: m.loughlin@mmu.ac.uk

given the world as it is, theorists advising governments, local authorities and professional bodies can help to foster the illusion that fundamentally arbitrary decisions and constraints have the support of, or are grounded in, 'objective, impartial reasoning informed by experts' (Loughlin,⁴ p.182). This in turn can promote a mentality I characterised as 'formalism' (Loughlin,⁴ pp.199,232), whereby practitioners with context-specific knowledge are encouraged to think of their own moral intuitions, developed via an interaction with their patients, as merely 'subjective' reactions, in contrast to such impartial reasoning. Whether intended or not, the political role of the theorist, I argued, was often to 'bestow academic credibility' on policies and processes, making it subsequently harder for others to criticise these processes – where 'others' included patients demanding the best care available, and professionals attempting to 'defend their corner', to protect their traditional values and practices from random transformation to suit the prevailing political currents and economic agendas.

The debate in this journal between Wyller^{7,8} and Magelssen et al.³ suggests to me that these concerns are still very relevant to on-going debates in clinical ethics. Wyller's attempt to 'defend his corner' as a clinician leads to his being perceived as either ignorant or in denial of certain realities; as unreasonably refusing to change his practices in the light of those realities; or as wedded to theoretical approaches that are in fact not adequate for sound practical reasoning. In other words, he is either insufficiently realistic, or insufficiently practical/pragmatic, or both. So, for instance, his insistence that 'scarcity in healthcare' is the result of political factors and not simply 'a given' is taken by his critics to reflect an ignorance of, or refusal to admit ('let on') the true, 'pervasive' nature of the 'phenomenon' of rationing (Magelssen et al.,³ p.2). His scepticism about the attempt to apply universal moral principles to determine 'fair' decisions in particular cases, and his claim that the outcomes of any such reasoning process are likely to be morally 'arbitrary' (Wyller,⁷ p.258, cited by Magelssen et al.,³ p.6) provokes an answer that is helpful in revealing his critics' own fundamental assumptions about the proper role of moral theories in practical discourse. As we will see, they effectively stipulate that a 'sound ethics of physician-patient relationship' must 'accommodate' the fact that rationing is 'unavoidable', where 'accommodating' this fact includes providing practical guidance – non-arbitrary answers – to questions about how to ration in particular cases.

The unreasonable man

In fact, it seems to me, Wyller's role in this exchange is that of Shaw's 'unreasonable man'. However well

intentioned, his critics' attempts to get him to conform to the project of 'bedside rationing' are part of a process that stifles protest and undermines complaint on the part of those either working within health systems, or users of the systems who feel disadvantaged by being on the losing side of a given resource-allocation decision. Hence their somewhat disparaging comments about 'sentimentality spurred by heart-wrenching stories of individual patients or groups', in contrast to the rationality of an overall system founded on 'general principles... decided upon through a fair and transparent process' (p.5). While they do not deny that there can be a 'tragic' aspect to the outcomes of rationing decisions (p.5), the very existence of developed theories of just rationing, accompanied by evidence that the rationing process was 'performed explicitly and in line with justified moral principles' (p.2) serves to break the link between that sense of tragedy, the patient's feeling that her current situation is 'unfair' and any conclusion to the effect that she has suffered a genuine injustice. When all the ethically and pragmatically endorsed policy calculations have been performed, there is a remainder, a 'left-over' feeling that injustice at the personal level has been defined out of existence to enable the ascription of 'justice' at the impersonal, societal level. This is what frustrates and distresses the quite properly compassionate professional.

Magelssen et al.³ recognise this sense of unease and concede that rationing procedures may 'mask the residual dimension' of regret at the 'loss of the very real goods' (p.4) that were promised by the de-prioritised possibilities. Even so, the logic of their position dictates that they regard this outcome as 'unfortunate' rather than unjust. While we might kindly overlook the patient's linguistic error in claiming that her preventable suffering is 'so unfair', if that suffering is the outcome of a 'systematic approach to priority setting' (Magelssen et al.,³ p.4) then in the sense that matters (the sense that determines action) she is (on this view) strictly incorrect. It's regrettable, unfortunate, even tragic – but not unjust. For if we were to admit that an outcome was at once unjust and unavoidable given the system as it is, then this would have the radical implication that system needed changing as a matter of the utmost moral urgency, because it necessitates injustice – and this possibility seems to be one ruled out as beyond the scope of a 'pragmatic' debate meant to inform practitioners in the real world.

Defenders of 'bedside rationing' believe that reasonable practitioners will operate with a realistic sense of what is affordable given the resource base for the system as a whole, and will not demand more for their patients merely because they are their patients. From their perspective, clinicians like Wyller are being partial in a morally problematic sense elicited

by the characteristically Kantian question: 'what if everybody did that?' If the outcome of everybody's refusal to 'ration at the bedside' would stretch the health system's resources beyond its politically determined limits, then Wyller is either being unreasonable (or indeed unjust) in asking for more for his particular patients than for others, or he is simply being unrealistic regarding what the system can sustain. What this approach to clinical ethics takes as 'given', then, is the fact of 'scarcity' in the sense of the particular, finite limits allocated to health care in the economic system within which the practitioner must operate. These economic facts effectively provide the moral framework for the debate: they form the basis from which all thinking about what it is reasonable to ask for on behalf of one's patients should begin, thus marking out the remit of the debate about bedside rationing.

Other questions (crucially including, how much of a society's economic base should be devoted to providing health care) are not illegitimate; they are just part of a different debate. Magelssen et al.³ see no contradiction in Wyller agreeing to 'ration at the bedside', while remaining one of those clinicians 'who decry what they perceive as the underfunding of healthcare' (p.4). Indeed, he should be 'eager to support efforts to instigate transparent priority setting based on morally justified criteria and procedures... until he succeeds in convincing the electorate and the politicians that healthcare funding must be increased dramatically' (p.4). It is not that they want to dismiss his political views about the underfunding of healthcare, or any other views, he might have about the irrational, wasteful and grotesquely unequal distribution of resources and expenditure within the developed national economies of the world and the global economy. It is just that those questions are beyond the remit of the debate about rationing in clinical ethics, where the question is: given the resources in fact available, how do we set priorities ethically?

What is not clear is why, given these limitations, any non-arbitrary answer to the question of how to ration justly should be possible in the sort of controversial cases where the authors regard guidance from ethical theory as being needed. To take an example considered by Magelssen et al.³ (p.3) and discussed at greater length below, suppose some health policy-makers have to decide whether to prioritise spending on reconstructive surgery for breast cancer patients who have undergone mastectomy or surgery for children with cleft lip and palate. To suggest that one can use some theoretical device, be it Kantian moral theory, Rawlsian conceptions of distributive justice or the health economists' Quality-Adjusted Life Year (QALY) to determine the answer is to assume that there really is a correct answer here, that the choice is

not morally arbitrary.^a Why should that be the case? This at least needs a lot of argument – it should not be an assumption of the discourse. There is a danger, as we'll see, that if we participate seriously in the rationing debate, we may end up judging the adequacy of a theory precisely with reference to its ability to deliver apparently determinate answers to questions which, our sound moral intuitions tell us, should not have any such answer. In such cases, the theory functions to enable those making policy decisions to claim an authoritative, rational status for choices that would otherwise be perceived as arbitrary.

Should literally any question about what one ought to do admit of a determinate answer, whatever the options presented and whatever the background conditions restricting the options? Bioethics discourse has produced its share of bizarre discussions of what one should do in imaginary cases, that in fact only served to illustrate the absurdity of some questions beginning: 'What should you do if...?' (Loughlin,⁴ p.6). Years ago, I was asked what I should do if a James Bond villain tells me to shoot five delegates at a bioethics conference – or else his associate will set off a bomb in the main lecture theatre killing many more, perhaps all the delegates. When I refused to answer, I was made to feel like the celebrity mentioned in my first paragraph, confronted with an insistent request for a 'straight answer' to a question that does not admit of one. For clearly, there is no non-absurd, non-offensive way to reason my way to an answer as to which delegates I 'should' kill. Should I target the old, those who look ill, or maybe even the disabled, making all manner of assumptions that many would regard quite rightly as utterly offensive, as to how we measure the value of a person's life? Of course not. If the death of at least five of the delegates really was unavoidable (and if I regarded myself as responsible not only for what I did but for what my actions and omissions led to others doing), then I should admit that the choice as to which people I select is random, morally arbitrary.^b But surely, my reasoning would be better employed in considering ways that I might avoid the problem altogether and get the better of the villain. Similarly, in the real case of the choice between the two groups of patients, might not our reasoning faculties be better employed in thinking of ways to arrange our social order such that the needs of both the thoroughly deserving groups in the example could be met – i.e. engaging in the sort of political discourse that is ruled beyond the remit of the rationing debate?

In contrast to his critics, Wyller sees his primary obligation as to the patient in front of him, not to the politician whose job it is to make the whole system 'tick over' effectively (Wyller,⁷ pp.259–260). Utilising the insights of Aristotle and Levinas in his search for

a 'moral framework' for the role of caregiver, he argues for a form of 'moral nearsightedness' exemplified by the New Testament's Good Samaritan:

The Samaritan did not consider whether part of his limited resources should be reserved for another individual or spread among all the poor in Palestine. His moral obligation was awakened by the particular individual in need. (Wyller,⁷ p.260)

According to Wyller's version of the 'ethics of proximity' (p.257), for each of us it is true that: my moral remit is determined by the needs of the person the New Testament would identify as my 'neighbour': 'every human being who incidentally comes in my way deserves my compassionate care' (p.257).

Far from viewing this mentality as socially irresponsible, I think Shaw would point out that it is in fact this sort of 'unreasonable' refusal to make the system tick over that creates a political imperative for change. If a system prevents us from giving people the care they deserve, then that system represents not a starting point for ethical thinking, but an arbitrary barrier to moral practice. Of course, we need to recognise its reality and to understand its workings, but our attitude towards it should be strategic – it is something to be negotiated, challenged where possible, but not willingly and routinely accommodated. The more people who think like this, the more we have a 'bolshy' workforce and critical citizenry,⁹ the more we have a population prepared to call its political leaders to account. The 'reasonable' clinician, perhaps prepared to 'decry' an underfunded system, but only on his days off work, is likely to prove less of a challenge to underfunding and arbitrary restraint than one who, like Wyller, states openly that he will not 'try' to accommodate demands incompatible with his own, thought-through ethic of care. If workers who do the jobs that really matter do start to demand, en masse, to be properly resourced, and if they win the support of the public in doing so, then perhaps we could see some genuine social progress. In the meantime, if Wyller manages to win better treatment for his patients, then he will not repent or see himself as 'the cause' of other patients losing out – as though he were responsible morally for the economic constraints on the system which he did not create.

Causal reasoning in the rationing debate

In response, Magelssen et al.³ might protest that he is responsible. He did not create the constraints within which he must practice, but he is responsible for being aware that the system is resource-constrained. It follows, logically, that any additional benefits he

secures for his patients will be achieved at a cost to patients elsewhere. As Alan Williams, the health economist and inventor of the QALY used to say, 'in a resource-constrained system "cost" means "sacrifice"' (Williams,¹⁰ p.223). They give an example which they believe illustrates this point effectively.

In Norway, 'breast cancer patients who had undergone mastectomy bared their scars at a rally outside of parliament, in order to protest the long waiting lists for reconstructive surgery' (Magelssen et al.,³ p.3) as part of an ultimately successful campaign on the part of these patients to improve their lot. Far from congratulating the campaigners, the authors report that it was later 'acknowledged' (by the Norwegian Ministry of Health and Care Services) that 'this allocation of healthcare resources at the macro level had the very unfortunate side-effect of increasing waiting lists for surgery for children with cleft lip and palate' (p.3). In other words, the politicians who made the concession chose not to increase the overall health budget – not to charge a little more in taxes to the super-rich or large corporations, not to cut spending on armaments, on their own salaries and perks or indeed the inflated salaries of game show hosts and other socially useless^c celebrities (no doubt because they understood that such options were 'beyond their remit'). Instead they transferred the money from somewhere else in the health system and the children became what Williams would call the 'sacrifice' in this case.

Magelssen et al.³ describe this as a 'side-effect' of the campaigners' actions. It's worth noting that this is a causal claim: to say X is a 'side-effect' of Y is surely to attribute causal responsibility to Y for X. So they seem to be attributing responsibility for the suffering of the children to the women who bravely campaigned for an end to their own suffering, and to all who supported them. If this is not what they are doing, then what exactly is the point they are making via this example?

How do they arrive at this causal claim? The manner of reasoning here seems straightforward: they consider a counter-factual statement that 'had that money not been spent on the one group of patients, it could have been spent on the other', note its truth and promptly conclude that the spending on the one group caused/ rendered inevitable the cuts to spending on the other. But in that case, any number of other counter-factual propositions could provide an equally credible basis for the attribution of causal responsibility. Had the politicians made a different decision resulting in one of the alternatives listed above, then both the breast cancer patients and the children awaiting surgery could have been funded, while (for instance) the profits of the makers of Norway's Got Talent could have been taxed more heavily. So the profits of the makers of that particular exploitative pulp entertainment show could

equally be characterised as the cause of the children's suffering. (As could expenditure on armaments, etc.) The point is, it is all a matter of which counter-factual you are prepared to consider, and the range of counter-factual possibilities the authors are prepared to consider is quite simply a result of their stipulation that they will only consider possibilities delimited by the health budget as it so happens to be fixed. There is no more 'objective' reason for this stipulation than the fact that this is the declared remit of their discourse. The question then arises, for Wyller and others: what rational grounds have you given me to want to be part of that discourse? Why not be part of a less restrictive discourse, that allows us to consider broader social factors in our analysis of the causes and what is/is not 'avoidable'? The question is not which realities we are aware of, but the moral significance we accord to them in determining our own thinking and actions. While it might well serve the interests of the minister for health to wish to restrict all thinking to the options available given 'the system as it is', it is by no means clear why that is a useful or even morally acceptable starting point for clinicians or indeed for citizens. It must sometimes be part of our role to do all we can to challenge the limits imposed upon us. To consider another counter-factual possibility: the citizens of Norway could have had as vociferous a campaign for the children with cleft lip and palate as the one launched for the breast cancer patients. It need not have been restricted to the citizens of Norway – I could have joined the campaign. So we all bear responsibility for the failures of the system, every time we tolerate injustice, every time we rationalise the suffering of another human being.

Making progress

What concerns me about the view of Magelssen et al.³ is the sense coming across from their paper that such broader political questions can be neatly ruled off from any discussion of the ethics of practice, and a subsequent lack of investigation of their own role as theorists. We all agree that sometimes professionals will not be able to 'defend their corner' in the way I have used this term, and the economic constraints upon them will force them to provide sub-optimal care to their patients. It is not clear that, when this happens, there need be any non-arbitrary answer to the question: who should suffer? To act as though there must be, to make it one's job to find this answer, may seem commendable, but it may serve to place a rational gloss on brute factors whose arbitrariness really should be made clear to all, such that people actually start to have the feelings of outrage that Magelssen et al.³ seem, at times, to be disparaging (see the previous point about 'sentimentality').

Historically, arrangements we would now regard as wildly irrational and patently unjust have been defended by those who noted that changing them was 'unrealistic' – where being unrealistic means calling for something that is simply not viable given background economic arrangements that are considered beyond the remit of the topic under discussion. Some slave societies are better and some are worse than others, and the same can be said of particular slave owners. So it might have seemed 'reasonable' at certain points in human history to develop an 'ethics of slavery', to encourage more 'ethical' slave owners for the benefit of slaves. The problem with this idea is that slavery is inherently immoral, so any such 'ethic' is patently untenable:

If our starting point is a slave society and that 'background context' is outside the scope of our discussion, we simply cannot arrive at a solution to the problem of how to organise the production of life's necessities that is 'fair to all concerned'. Why should we just assume that our own place in history is so much more fortunate, that given this starting point we can find rational and fair solutions to our social problems without fundamental social change? (Loughlin,⁶ p.59)

Is it not even possible that our current social and economic arrangements – with all of the inequality and suffering they necessitate – are the real problem, in the same way that (most of us readily accept) the underlying social and economic arrangements in many earlier human societies were the true obstacles to justice and social progress? In that case we need to be very careful, as theorists, about work we do that might serve to vindicate such arrangements:

By offering solutions to practical problems via rational methods, ethicists confirm that 'rational' and 'ethical' solutions are possible within the present political environment: it is not that the environment must change radically if reason is to survive at all, but rather rational debate can flourish provided it accepts certain arbitrary limits placed upon it. By agreeing to work within the confines of 'realistic' assumptions, such theorists may find that their work functions to underwrite the very conceptions of reality and practice which must change if social rationality is even to be possible. (Loughlin,⁴ p.155)

Consider the response of Magelssen et al.³ to Wyller's claim that the application of universal moral principles to determine 'fair' decisions in particular cases led to morally 'arbitrary' outcomes, while his preferred 'ethics of proximity' furnished the role of caregiver with a moral framework. Their answer reflects what I have elsewhere characterised as an assumption about

proper methodology in applied ethics.⁵ They answer that, if rationing is unavoidable given the system as it is (which they believe they have demonstrated to be a fact) then ‘a well-developed modern professional ethic ought to be able to incorporate and justify notions of justice and rationing’ and their concern about ‘proximity and care ethics approaches’ is that they may be ‘simply unsuited to provide such an ethical framework for medicine’ (p.6). This does suggest they regard it as the job of applied moral theorists to explain, given the world as it is, how non-arbitrary solutions are in fact possible, however intuitively unfair and arbitrary the rationing process might appear to the ethically untrained.

Such theorists risk becoming implicit apologists for the political status quo. When one considers the sheer irrationality of the broader social order that allows the salary of an individual CEO to exceed the entire health budget of a developing world nation, while something in the region of 29,000 children per day die in the developing world from poverty-related disease and malnutrition,¹¹ the desire to be ‘reasonable’ in their sense, to frame one’s moral thinking with reference to the need to keep the system as it is ticking over, might depreciate. It is by large numbers of people failing (or indeed refusing) to work within the current realities that we have the best hope of actually changing those realities.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. Or at the very least that the employment of the relevant theory somehow renders the whole process more rational, more justified than one where decisions were made by some patently arbitrary process, such as a lottery.
2. A reviewer for this journal suggests this claim commits me to the view that ‘all moral decisions are arbitrary’. It doesn’t. The denial of the claim that ‘literally any question about what one ought to do admits of a determinate answer’ does not imply the assertion that ‘no question about what one ought to do admits of a determinate answer’. Given the choice between not killing anyone at the conference and killing five delegates, I should clearly make the decision not to kill anyone! (Anyone who purports to disagree is either disingenuous or psychotic.) But if you insist on saying: ‘But suppose you simply

have to kill five people, how should you select them?’ then there is no reason to assume that I must be able to supply a non-arbitrary answer to that particular question. To assume that you can set up any situation you like, limit the choices available in any way you like, then wheel in Kantian, utilitarian or some other moral theory to provide a determinate answer to the question ‘so what should you do?’ is to abuse these moral theories⁴: they were designed to consider fundamental questions about the nature of moral thinking, not to rationalise any decision you may care to make or to prove that there just has to be a determinate answer to literally any question you care to frame.

3. A reviewer points out that this is a ‘value-loaded’ term, as is my previous use of the term ‘bolshy’ and my later assertion that shows like Britain’s Got Talent, America’s Got Talent, Norway’s Got Talent and (by implication) all the other members of the ‘Got Talent’ family are ‘exploitative’. Let’s be clear, there is nothing whatsoever to be ashamed of in being a ‘bolshy’ worker: the whole point of this paper is to praise the ‘unreasonable’ worker who defends her/his corner in the sense I explain. So there is nothing pejorative about this term. The same cannot be said for terms like ‘useless’ and ‘exploitative’. My view is that a TV show which invites desperate and often deeply misguided people to prove they ‘have talent’ in front of a panel of wealthy celebrities, to be routinely subjected to public humiliation (except in the rare cases where a true ‘gem’ is found, and instantly signed up to an extremely restrictive contract by the show’s multi-millionaire founder) is indeed ‘exploitative’. If there were such a thing as the Platonic Form of Exploitation, then this show would be it. Frankly, the term ‘useless’ is far too moderate a characterisation of its founder and key presenter, known affectionately as ‘Mr Nasty’ by his admirers for the hilarious way he ‘savages’ the array of ‘flops’ paraded before him while ‘earning’ his annual income of something in excess of £50 million.

References and notes

1. Shaw GB. *Man and Superman*. London: Penguin Books, 1948.
2. Daniels N and Sabin JE. *Setting Limits Fairly: Learning to Share Resources for Health*. New York: Oxford University Press, 2008.
3. Magelssen M, Nortvedt P and Solbakk JH. Rationing at the bedside: Immoral or unavoidable? *Clin [AQ1]Ethics* 2016; 22–22.
4. Loughlin M. *Ethics, Management and Mythology. Rational Decision Making for Health Service Professionals*. Oxon: Radcliffe Medical Press, 2002.
5. Loughlin M. Arguments at cross-purposes: moral epistemology and medical ethics. *Journal of Medical Ethics* 2002; 28: 28–32.
6. Loughlin M. Thinking: where to start. In: Roulston S (ed.) *Prioritising Child Health: Principles and Practice*, Chapter 9. London: Routledge, 2007, pp.51–62.

7. Wyller VB. Give the doctor what is due to the doctor! Why “fair rationing at the bedside” is impossible. In: Danis M, Hurst S, Fleck L, et al. (eds) Fair Resource Allocation and Rationing at the Bedside. New York, NY: Oxford University Press, 2015, pp.253–262.
8. Wyller VB. The bedside rationing paradigm and the shortcomings of modernist ethics. Clin Ethics 2016; 22–22.
9. Mill JS. On Liberty. London: JM Dent & Sons Ltd., 1983.
10. Williams A. Economics, QALYs and medical ethics – a health economist’s perspective. Health Care Anal 1995; 3: 221–226.
11. UNICEF, <http://www.unicef.org/mdg/childmortality.html> (2015, accessed 21 August 2016).