
Reduce, Reuse, Recycle. We learn the three Rs as conscientious school children, after which we happily forget this plea for conservation as wasteful and busy adults. In general, it’s probably good advice, but how does it apply to the so-called single-use items purchased in bulk by hospitals and ranging from anesthetic circuits to surgical instruments? According to Alice Moszczynski, reuse of single-use items in hospitals is a common, and often nondisclosed practice, despite current recommendations advocating single use only [1]. These items are frequently sterilized then used again, generally without informing the patient. In “Is Once Always Enough? Revisiting the Single Use Item” Moszczynski draws on several ethical frameworks to address this complex issue.

Moszczynski begins by emphasizing the most obvious point of ethics inherent in any hospital practice: that of informed consent. She cites the ethical theory of contractarianism, which highlights maximizing self-interest as a moral paradigm [2]. If a patient’s autonomy is to be respected, she asks us, is it essential that use of a previously used single-use item be disclosed? It is certainly not a requirement to provide every detail of every procedure [3]. But if current recommendations advocate single use only of these items, it seems reasonable to conclude that any practice deviating from accepted guidelines would demand informed consent, especially in a country marked by increasing litigation and rising malpractice premiums.

Based on my own experience in Pittsburgh hospitals, it appears that most patients are unaware of the matter, and in fact, as Moszczynski implies, I have never been posed a question regarding the practice. Epstein, however, argues that just because a patient is unable or disinclined to frame the question, doesn’t mean he or she would not benefit from the information [4]. Even if we assume that the reused item was properly sterilized and has the same safety and efficacy as an unused item—a separate concern addressed by the author—the choice could be compared to the selection of generic versus brand medications. In the latter case, patients are given an option between the two. Nevertheless, hospital policies often provide no guidance to physicians in allowing patients to decline a reused single-use item [5, 6]. This preemption of shared decision making, most likely viewed as a minute detail omitted
for the sake of convenience and saved time, could also be interpreted as a remnant of paternalism which pervaded medical culture until recently.

Although autonomy and informed consent are vital to maintaining the best possible individual patient care, Moszczynski points out that in our current economic climate, the needs of the health care community at large cannot be overlooked [1]. She applies utilitarianism in suggesting that reuse of items designed for single use may lessen the financial burden on society. Although she counters that no price can be put on a person’s health, the practical fact is that we live in a nation of limited health care resources, the allocation of which is an area of active political debate. If used single-use items are sterilized and donated to third-world countries, those same items should be acceptable for a Western nation with rapidly escalating health care costs [1]. That said, it remains unclear without a definitive cost-benefit analysis that considers the labor, materials, and time required for sterilization procedures whether reuse actually saves money [1].

Finally, we would be remiss if we did not return to the patient who drove conservationists to coin the three Rs: Mother Earth. Moszczynski shows us that the contractarianism and utilitarianism analyses described above both appear in opposition to the “land ethic,” which places value on the ecosystem as a whole. In the welfarist approach, the well-being of sentient creatures must be advanced at the expense of the inanimate [7]. Applied to the field of medicine, welfarism suggests that health care must be advanced at the expense of generating large amounts of medical waste. As anyone who has seen the Disney/Pixar feature film WALL-E understands, the well-being of the environment can directly impact the well-being of its inhabitants. A desolate planet covered with heaping piles of garbage and radioactive waste benefits neither the individual nor society. In fact, the movie depicts an environment so toxic that it forces the entire population of Earth to relocate into space and assume a sedentary, and almost certainly unhealthy, lifestyle.

Although WALL-E is fictional, real-life reports of medical waste washing up on beaches in England and the discovery of medical waste contaminated by Mycobacterium tuberculosis make it clear that the environmental footprint of a health care facility cannot be overlooked [8, 9]. While single-use items may advance patient care, they also contribute to our growing landfills, with potential risk to those living nearby. Similarly, reprocessing a used item requires chemicals that may end up in our water or even food supply [1]. While contractarianism, utilitarianism, and land ethic may seem to be in opposition at first glance, the NIMBY phenomenon of the 1980s proved that a neighborhood garbage dump is never in a community’s self-interest.

There appears to be no single solution to the problems created by reusing single-use items. A blanket consent, signed at the onset of hospitalization, covering such matters as generic medications and single-use items, could adequately address the dilemma of informed consent. Official hospital policies will be essential in achieving this goal. More data is needed regarding the cost-benefit outcome of reuse and the
safety and efficacy of the practice. Unfortunately, there is little incentive from manufacturers, motivated primarily by sales, to perform these studies, making government funding critical. Although the environment cannot be overlooked, one need only walk through a single hospital wing to appreciate the sheer volume of medical waste we generate. Even if items cannot be reused, there is no reason why the plastic gowns, metal needle-drivers, and paper charts cannot be recycled. Moszczynski offers great insight as she interprets reuse of single-use items within three distinct ethical frameworks. Her work is undoubtedly a strong first step in developing a comprehensive and balanced solution to this complex problem.

References

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