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Moral expertise in the clinic: lessons learned from medicine and science

Philosophers and others have questioned whether or not expertise in morality is possible. This debate is not only theoretical, but also affects the perceived legitimacy of clinical ethicists. One argument against moral expertise is that in a pluralistic society with competing moral theories no one can claim expertise regarding what another ought morally to do. There are simply too many reasonable moral values and intuitions that affect theory choice and its application; expertise is epistemically uniform. In this paper we discuss how similar concerns have recently threatened to undermine expertise in medicine and science. In contrast we argue that the application of values is needed to exercise medical, scientific and moral expertise. As long as these values are made explicit worries about a pretense to authority in the context of a liberal democracy are ill-conceived. In conclusion we argue for an expertise that is epistemically diverse.
Keywords: Moral Expertise, Scientific Expertise, Medical Expertise, Values

Philosophers and other theorists have questioned whether or not expertise in morality is possible (eg. Archard 2011, 19-127; Gesang 2010, 153-9; Cholbi 2007, 323-34). This debate is not only theoretical, but also affects the perceived legitimacy of clinical ethicists (Rasmussen 2011, 649-50; Shalit 1997, 24-8). If clinical ethicists are to be legitimate members of the healthcare team, then they should provide a form of expertise as other members of the healthcare team do. The expertise that clinical ethicists are typically expected to provide concerns how one ought morally to act. But this demand for moral expertise has often been taken to be problematic. If moral expertise consists of knowing what one ought morally to do, then clinical ethicists working in a pluralistic

and democratic society cannot claim this knowledge for someone else, e.g. a patient or clinician. The difficulty resides in the fact that in a pluralistic society there are competing moral theories that guide action as well as a large range of reasonable values and moral intuitions that affect not only what theory one applies to a particular moral decision, but also how one applies it. Thus a clinical ethicist's training cannot ground a claim to authority over what one morally ought to do; there are simply too many legitimate values and moral intuitions.

To highlight the difficulty that competing moral theories, values and intuitions present, moral expertise is often contrasted with gold standards of expertise, e.g. clinical and scientific expertise (Gesang 2010, 156-8; Cowley 2012, 337-41; Varelius 2008, 127-32; Cholbi 2007, 324-6). These comparisons are meant to emphasize the inadequacies of moral expertise. But such a framing of the problem is anachronistic. Many of the supposed difficulties with moral expertise are not exceptional; it is now widely accepted that experts in medicine and science also regularly face a plurality of reasonable choices, which require for their resolution individual judgment and the application of values (e.g. Douglas 2009; Longino 1990; Montgomery 2005).

Unfortunately, one of the effects of the recognition of the role that values and subjective judgment play in medicine and science has been to undermine confidence in these forms of expertise (Evidence-Based Medicine Working Group 1992, 2420-5; Douglas 2009). Those who argue for the continued worth of expert judgment do so by developing accounts of medicine and science that embrace the values that they understand as inherent to each discipline. Doing so alters the traditional account of

expertise as epistemically uniform and replaces it with an account that recognizes epistemic diversity.

I. Moral Expertise and the Gold Standards

The theoretical literature on the possibility of moral expertise presupposes a contrast—explicit or implicit—with other supposedly less questionable forms of expertise. The nature of these forms of expertise vary, but it is not uncommon for expertise in medicine or science to be treated as the gold standard. Consider a few examples.

In Bernward Gesang's (2010, 153-9) article, 'Are moral philosophers moral experts?' he argues that ethicists are only weak or semi-experts. While ethicists are experts, i.e. they reach correct moral judgments with a high probability and for the right reasons, they cannot silence the opinions of non-experts. For Gesang (2010, 158-9) silencing non-experts is the litmus test for determining expertise in what he calls its full or strong sense. As Gesang (2010, 158) notes, the physicist can say to her student "You're wrong," but the clinical ethicist cannot do the same to those on her clinical ethics committee.

Moral expertise is weak because it is not epistemically uniform. That is, we cannot expect that argument and reflection will yield similar moral conclusions, as we often expect in medicine and science that well designed trials and experiments will yield similar conclusions. Gesang (2010, 156-7) considers at some length why moral judgments and experience differ in this respect from scientific judgments and experience.

He argues, for instance, that in science unlike morality there is a priority of observation over theory (Gesang 2010, 156). This priority is due, he suggests, to the fact that experience is less problematic in science than in morality. Scientific theories attend to our observations and must account for these experiences; as a result they cannot for long stand at odds with observations or experimental results. Moral theories, on the other hand, cannot attend to experience in the same way because our moral experiences are affected by our moral theories and values (Gesang 2010, 157). Given the dialectic between moral theory and moral experience, and given that the result of this dialectic will differ among individuals with different legitimate moral values and intuitions, moral expertise cannot be strong.

But if moral expertise cannot be strong, for Gesang it can still be a form of expertise. In his response to Gesang, Christopher Cowley (2012, 337-42) disagrees: morality is not an expertise of any kind. It is interesting that his argument with Gesang is primarily carried out over how best to understand morality's contrast with science. According to Cowley (2012, 338-41), Gesang does not recognize the implications of the differences between moral and non-moral experience. Primary among these differences is that moral judgments cannot be "correct" with a "high probability" and for the "right reasons", i.e. morality cannot be an expertise.

For Cowley (2012, 340) this language of "high probability" and "right reasons" is the language of science or medicine. In these disciplines one's predictions or diagnoses can be correct with respect to observation, experimental or lab results. But this is not the language that can be used to reference moral judgments. When we justify moral judgments we do so by articulating what and why certain considerations were

decisive in a particular instance, but precisely because moral landscapes are not shared as physical landscapes are we have no basis on which to call our decisive considerations the right" ones (Cowley 2012, 341).

Moreover, when it comes to determining whether our judgments are "correct" we have similar difficulties. According to Cowley (2012, 340), scientists usually agree about what kind of experimental result they need to corroborate a hypothesis; and even in those cases where this is not true they still usually agree about what type of experiment is needed to test an hypothesis. Ethicists, however, do not enjoy this kind of agreement, e.g. what kind of moral experience or outcome could possibly be decisive in the abortion debate? Again Cowley (2012, 340) attributes this difference to the fact that for science interpreting observations and experimental results is more or less unproblematic, while moral experiences yield different judgments for different people. As Cowley (2012, 340) puts the point, "All scientists are answerable to a singular realm of discoverable facts. But the same facts may well have different moral significant for different individuals."

Ruth Shalit (1997, 24-8) makes a similar point using medicine as the gold standard. She argues that the main difficulty with treating clinical ethicists as moral experts is that the criteria on which they base their recommendation will vary from ethicist to ethicist. This variation she argues is not found in medicine and thus accounts for why we can have clinical expertise. Unlike the surgeon who can say, "x is the right procedure to do at this time," the clinical ethicists cannot say, "y is the right thing to do now." The surgeon's expertise rests on a set of agreed facts about the body and what outcomes determine a successful surgical intervention, i.e. a surgeon's expertise is

epistemically uniform. But the ethicist faces legitimate disagreement about what facts are relevant and what outcomes indicate moral action, e.g. fewer bad consequences, fidelity to principles.

In Jukka Varelius's (2008, 127-32) paper 'Is ethics expertise possible?' he also compares moral expertise to scientific expertise. But Varelius makes a point different from Gesang, Cowley or Shalit. He argues that moral expertise is relevantly similar to scientific expertise and thus,

> …unless we want to conclude that there is no scientific expertise either,
> we should allow that ethical expertise is possible, even though ethics is
> concerned with moral right and wrong. (Varelius 2008, 128)

Although his point is different, the argument he has with those such as Cowley and Shalit is similar to the argument Cowley has with Gesang: how does moral expertise fare when compared to science or medicine? Because Varelius contends that moral expertise is similar to scientific expertise he argues that it is, in principle, possible.

According to Varelius (2008, 128-9) moral expertise is similar to scientific expertise because contrary to both Gesang and Cowley's characterization science is a value-laden enterprise. Citing post-positivist philosophers of science from Thomas Kuhn to Hilary Putnam Varelius argues that theories and values affect everything from observations to hypothesis selection to data analysis. Moreover, he further argues that the kind of expertise that scientists provide is relevantly similar to the kind of expertise ethicists can provide (Varelius 2008, 129-30). For instance, scientists can answer questions about the causes of natural phenomena and in doing so clarify, systematize and extend one's thinking about the natural world. Likewise, ethicists can clarify,

systematize and extend one's thinking about the ethical world by explicating the theoretical and practical commitments of a particular moral stance.

II. Skepticism Over Clinical and Scientific Expertise

How moral expertise compares to medical and scientific expertise matters in the debate over its possibility. Whether arguing for or against it philosophers and others evoke medicine and science as gold standards to which moral expertise ought to conform. But over the last few decades the epistemic value of medical and scientific expertise has been questioned. This skepticism is due to the growing recognition of the way that values and intuitions affect expert advice in these disciplines.

A. Medicine

In 1992 the evidence-based medicine working group published "Evidence-Based Medicine A New Approach to Teaching the Practice of Medicine" (Evidence-Based Medicine Working Group 1992, 2420-5). This paper heralded the arrival of evidence-based medicine (EBM), a new paradigm for medical practice. This paradigm promised to "de-emphasize intuition, unsystematic clinical experience and pathophysiologic rationale as sufficient grounds for clinical decision making…" (Evidence-Based Medicine Working Group 1992, 2420). In its place EBM would accentuate the use of evidence from clinical research.

The introduction of EBM is both prosaic and revolutionary. On the one hand, what doctor does not use evidence in her clinical decision-making (Grahame-Smith 1995, 1126)? On the other, EBM was and remains an attempt to undermine clinicians' expert authority (Charlton 1997, 87-98). Indeed their 1992 article the Evidence-Based Medicine Working Group write,

The new paradigm puts a much lower value on authority. The underlying

belief is that physicians can gain the skills to make independent

assessments of evidence and thus evaluate the credibility of opinions being

offered by experts (Evidence-Based Medicine Working Group 1992,

2421).

Clinicians did not take such a denigration of their expertise lying down. In 1995

the *Lancet* ran an editorial arguing that EBM should build on rather than de-emphasize

clinicians' experience. In 1996 members of the Evidence-Based Medicine Working

Group appeared to agree and responded in the *British Medical Journal* that EBM is the

integration of clinical expertise with the best external evidence (*Lancet* 1995, 785;

Sackett et al. 1996, 71-2).

But EBM's commitment to this integration has been repeatedly questioned. For

instance, in an effort to clarify what counts as the "best external evidence" hierarchies of

evidence were developed. These hierarchies typically rank evidence according to the

internal validity of their study design. The result is that systematic reviews and

randomized controlled trials (RCTs) are typically ranked at the top with expert opinion

ranked at the bottom. As Ross Upshur and Colleagues note (2001, 91), the result of these

evidence hierarchies is that the original tenets of the EBM working group's "manifesto"

remain unaltered.

The original tenets of EBM explicitly aim to de-emphasize clinical intuition and

experience, two important aspects of clinical expertise to which we might add a third:

clinical judgment (Montgomery 2005). By de-emphasizing these aspects of expertise

proponents of EBM seek to decrease the uncertainty of medicine, both in diagnosis and treatment (Goldenberg 2006, 2623).

Uncertainty in medicine arises from at least two different sources. First medical diagnosis and treatment recommendations occur within the context of incomplete information. Patients describe what ails them in their own words possibly leaving out important factors, clinicians can order diagnostic tests but they can never order all the tests that may be relevant, and even seasoned clinicians may be inexperienced in the face of some complaints. Second, clinicians work within a surfeit of information. Patients give their history and provide relevant and irrelevant details, when clinicians perform a physical exam they will gather relevant and irrelevant information, and if clinicians order diagnostic tests sometimes the results will be relevant to a diagnosis and treatment and sometimes they will not.

In the face of incomplete, but nonetheless abundant information clinical experience, values and judgment come into play (Montgomery 2005). Clinicians must use experience and values to bridge the lack of information and they must use their judgment to determine what pieces of information are relevant to a particular case. The result is that different clinicians may diagnosis and treat the same or similar patients differently; expertise is epistemically diverse. For instance, prior experience with patients may lead one clinician to make a different diagnosis than another clinician with a different set of patient experiences. Moreover, the values that a clinician holds can affect their treatment recommendations, e.g. with regard to the same set of symptoms some clinicians are reluctant to prescribe antibiotics, while others are more willing. Furthermore as Ashley Graham Kennedy (2013, 487-500) argues, how clinicians

exercise their judgment affects their diagnostic ability. All of these differences help to explain the usefulness of second opinions.

EBM seeks to reduce some of the uncertainty of medicine by minimizing the effects of experience, values and judgment. As the Evidence-Based Medicine Working Group note, the first assumption of the EBM paradigm is that interpretation of information derived from clinical experience and intuition may be misleading (Evidence-Based Medicine Working Group 1992, 2421). In place of clinical experience and intuition, i.e. expertise, systematic and unbiased evidence from epidemiologic studies will provide confidence (where previously we had uncertainty) in prognosis, the value of diagnostic tests and the efficacy of treatment. Or as Maya Goldenberg (2006, 2623) has put the point,

> Evidence-based practices are…enormously appealing in the age of moral
> pluralism; rather than relying on explicit values that are likely not shared
> by all, the evidence" is proposed to adjudicate between competing
> claims."

Goldenberg (2006, 2623-4) goes on to criticize the idea that evidence can adjudicate between competing claims arguing that such a notion presupposes as Cowley put it a "shared physical landscape" when in fact post-positivist philosophers of science have convincingly argued that observations are theory laden and our theory choices are underdetermined by the data. Goldenberg is not alone in criticizing EBM and its ambitions. Most recently, Trisha Greenhalgh and colleagues' (2014, g3725)article in the BMJ asks if EBM is a movement in crisis? One crisis point is that EBM stifles the development of clinical expertise. They argue that the de-emphasis on clinical

experience and intuition combined with an emphasis on evidence summaries and clinical guidelines decreases tolerance of uncertainty and the ability to apply practical and ethical judgment to clinical cases (Greenhalgh et al. 2014, g3725).

These outcomes are problematic in part because the very *use* of evidence requires clinical judgment and thus clinical expertise. For instance, clinical guidelines are helpful, but clinicians need to use judgment in determining how to apply them; the published results of RCTs are valuable pieces of information, but clinicians need to use judgment to determine whether their particular patient is sufficiently similar to the trial population to benefit from the treatment. Greenhalgh and colleagues (2014, g3725) evoke the Dreyfus brothers model of skill acquisition and note that the most advanced stages of this model are characterized by intuitive reasoning and the selective use of evidence, i.e. advanced expertise. Ironically, they argue that by de-emphasizing clinical experience and intuition EBM overlooks the evidence on expertise.

B. Science

Philosophers, sociologists and others have been debating the epistemic status of expert scientific claims since at least the 1970's. Early in the debate theses regarding the social construction of science suggested that scientific knowledge claims are no different in status from any other knowledge claim, while others argued that scientific knowledge claims have a special status that should compel acceptance (Douglas 2009, p. 5-7). When moral philosophers and other theorists such as Gesang, Cowley and Shalit use science or medical science as a gold standard to which moral expertise should conform, they assume that science does have special epistemic authority, i.e. that scientific knowledge claims are more believable than other knowledge claims. It is this

assumption that allows them to use it as a gold standard. When philosophers such as Varelius evoke science they recognize that although science may be partially constructed it still functions with epistemic authority and thus it is still a gold standard despite the role that values play in its epistemic claims.

In Heather Douglas's (2009) book *Science, Policy and the Value-Free Ideal* she examines the role of science advisors, i.e. those scientific experts who advise governments on policy related to science. The expertise required of science advisors closely resembles the expertise of clinicians and ethicists in that science advisors must also apply their expert knowledge to make a recommendation to another person (Douglas 2009, p. 134). It is thus useful to examine Douglas's argument for the role that social and ethical values play in science advising.

Douglas (2009, 87-114) argues that social and ethical values are necessary to any science that has a public role, i.e. any science that has a role in policy, medicine, technology, etc. The reason for this necessity requires a two-part explanation. First we must understand why values play a role in science at all and then we must understand why the values employed when science plays a public role are specifically social and ethical values. While most philosophers of science accept that science involves the use of epistemic values such as consistency, accuracy and fruitfulness, many have been less willing to accept that science requires the use of non-epistemic values, i.e. social and ethical values.

In the previous section we mentioned that scientific theories are underdetermined by the data. Put otherwise, empirical evidence is insufficient to determine what beliefs we should hold. Consider an example. In 2003 Toronto researchers published research

that found that when pre-lingually deafened adults, i.e. adults who were deafened before they learned to speak, receive cochlear implants they report that their quality of life increases (Kaplan et al. 2003, pp. 245-9). This evidence, however, underdetermines what we should believe regarding the role that hearing plays in a good quality of life and what kind of policy regarding cochlear implants we ought to pursue.

While cochlear implants may improve self-reported quality of life, it is unclear whether this is because hearing makes one's life better or because deaf individuals lack resources and social support to lead a good quality life. Encouraging the funding of cochlear implants through a national or private insurance scheme may further reduce the resources and support needed to live a good quality deaf life. On the other hand, withholding funding could thwart a good quality of life if hearing is part of such a life (McClimans 2010, 74-5).

Because evidence underdetermines what we should believe scientists must use their judgment to determine when they have evidence that is sufficiently strong to support a particular belief. Put another way there is always an element of uncertainty in the use of scientific evidence. As Douglas (2009, 103) notes, this uncertainty is present at various points throughout a scientific study, from selecting standards of statistical significance, to the characterization of evidence throughout a study, to the interpretation of the evidence at the end of the study. This uncertainty is overcome only when scientists use their judgment—their expertise—to determine which standard, characterization, claim or theory is indicated.

When science has a public role, when for instance, a study has the potential to affect public policy or medical treatment options, then Douglas argues, the use of expert

judgment draws on social and ethical values. When science has the potential to affect others—and it very often does—then the values employed in using one's judgment should be connected to an individual's perception of what is at stake should one make a mistake. Scientists ought to evaluate the social and ethical consequences of error (Douglas 2009, p. 87). Douglas (2009, 50) quotes Richard Rudner in making this point,

> …Obviously our decision regarding the evidence and respecting how strong is "strong enough," is going to be a function of the *importance*, in the typically ethical sense, of making a mistake in accepting or rejecting the hypothesis…*How sure we need to be before we accept a hypothesis will depend on how serious a mistake would be* (Rudner 1953, p.2).

Robert Veatch (2005, 213-7) takes a similar position. In his discussion of the policy recommendations made by the Committee to Assess the Safety and Efficacy of the Anthrax Vaccine he argues that questions of "safety" and "effectiveness" go beyond the scientific data and require those on the committee to make evaluative judgments using ethical and other normative values. He argues that in determining the safety of the anthrax vaccine the committee needs to evaluate the relative importance of its benefits and negative side effects. But how one evaluates this importance is in part a function of how one evaluates the importance of the activities that warrant protection from anthrax, e.g. Middle Eastern Wars, the postal service, etc.

The seriousness of mistakenly accepting the anthrax vaccine as safe will depend in part on how one understands the legitimacy of a particular war or the necessity of the postal service. For instance, while the Committee noted that there was not enough data to draw conclusions of long-term side effects of the vaccine, they did not take this

uncertainty to outweigh the benefits of the vaccine given that they took the short-term side effects to be comparable to other vaccines (Veatch 2005, 216-7). Another group of researchers concerned with the legitimacy of the war may be less concerned about how the short-term effects of the anthrax vaccine compare to other vaccines and emphasize the uncertainty of the long-term consequences.

This example and others like it illustrate the kind of disagreement that can affect science advising (see Douglas 2009, 149-50) . By the 1970's science advising was fully institutionalized as part of the US policy process, but the reality of expert disagreement undermined the idea that science would make policy making more rational. Indeed the addition of science advising seemed to add a level of uncertainty and contention to an already complicated and contentious process (Douglas 2009, 138). Federal agencies responded to this uncertainty not unlike those in the EBM movement: they attempted to formalize the process through which scientists provided expertise thus relying as little as possible on the subjective judgment of scientists.

This formalization took place within the context of risk assessment. By the 1980's scientists were increasingly asked to provide expertise on their assessment of risk in a variety of contexts. This demand inevitably requires judgment on the part of the scientific expert since complete scientific information regarding risk in these contexts is lacking. Recognizing the lack of complete scientific information, yet wanting to minimize the role of social and ethical values in scientific expertise the National Research Council recommended that federal agencies using expert advice should develop inference guidelines (Douglas 2009, 142-3). Inference guidelines anticipate those areas in science where the data is incomplete and explicitly determine how

scientists should proceed in the face of this uncertainty. For example, an inference guideline might direct scientists to assume that if a chemical causes cancer in rodents, it is likely to cause cancer in humans (Douglas 2009, 143).

The use of inference guidelines have been controversial and difficult to implement in such a way that minimizes the use of values in scientific expertise. As Douglas (2009, 149) writes, a rigid inference guideline that infers human cancer from rat cancer ignores scientific evidence to the contrary, but a more flexible guideline that allows for the use of this evidence would require a case-specific judgment on the weight of evidence needed to overrule the inference from rat to human cancer. Such a judgment would resurrect social and ethical values, and thus undermine the very point of inference guidelines.

III. Expertise and Values

Subjective judgment, a reliance on experience and the use of values are part of clinical and scientific expertise. This is largely a result of the uncertainty inherent in these two disciplines While this uncertainty has led to movements that attempt to minimize the judgment, experience, and values required to exercise expertise as we have discussed there are increasingly vocal critics who argue that these variable *characterize* expertise.

But if judgment, experience and values are part of expertise, then how should we deal with disagreement and concerns regarding the erosion of value pluralism in a democratic society? Recall for Gesang (2010, 152, 158) strong expertise was identified by one's ability to silence the opinions of others. If expertise in its strongest form involves judgment, experience and values, then others should not be silenced in the face

of expertise. Indeed one of Shalit's (1997, 27) concerns about moral expertise in the context of clinical ethics is its pretense to authority in the context of a liberal democracy. To the extent that expertise in science and medicine also involves value judgments, then this criticism seems applicable to these disciplines also.

Douglas (2009, 155) addresses directly the concern over scientific expertise and democracy. She argues that in place of inference guidelines scientists providing expertise ought to make the values on which they base their judgments more transparent. Doing so, she suggests, would maintain the integrity of science while also allowing for democratic accountability in policy making. Values, once made explicit can be discussed and evaluated; understanding what scientists are willing to risk and why can help agency officials make better informed decisions. It can also help to keep them accountable since it is then possible to point to a decision and the values that supported it and ask why such a decision was made. Moreover, scientists need not apply values to policy recommendations in isolation, the public can help to assist in making the evaluations necessary to judgments about risk. Indeed as Douglas (2009, 157-4) discusses the National Research Council has also suggested increased public involvement in making judgments regarding risk assessment.

The importance of making one's values explicit has also been emphasized in clinical medicine, specifically in the context of the physician-patient relationship. As Ezekiel and Linda Emanuel (1992, 6) argue in "Four Models of the Physician-Patient Relationship" physicians should help to articulate the values that underpin different clinical recommendations and discuss why they feel some of these values are more worthy than others. Part of the argument for this position rests on the fact that different

values underpin different approaches to diagnosis and recommendations for treatment. When clinicians are explicit about the values that they endorse and why they endorse them, then patients are in a better position to evaluate their ethical and normative fit with a particular clinician. As in policy advising when patients understand the values that motivate their clinician's choices they are able to understand better what their clinician is willing to risk and why.

Moreover, making values explicit in the physician-patient relationship can also help to prevent coercion. When clinicians present recommendations solely on the basis of medical evidence, patients' reluctance or refusal to follow them can be construed as irrational. Allowing values to have a role in conversations about medical decision-making can provide a space for the kind of democratic pluralism Shalit and others wish to preserve . To be sure in the process of making values explicit clinicians (and others) may manipulate medical decision-making, i.e. use a values-based discussion as cover for a different agenda. But perhaps this concern is less a reason to abandon value-based discussions than it is a reason to institutionalize them.

Kenneth Fulford (2013, 544) makes a similar claim in his defense of value-based practice. Values-based practice is an approach to medical decision-making that goes beyond the physician-patient relationship to work with complex and conflicting values throughout health care (Fulford 2011, 976). The purpose of values-based practice is to achieve transparent and balanced decision-making among the values of those involved and to do so through a skills-based approach that emphasizes an explicit awareness of values (Fulford 2013, 537). But critics have argued that liberal democratic approaches such as this one that claim to "respect" the "diversity" of the values of those involved

and aim at "balanced" decision-making too quickly gloss over the way in which power operates (Brecher 2011, 997). The reality is that while the language of respect, diversity and balance is used it is the values of "whoever holds effective power" that are likely to prevail (Brecher 2011, 997).

In his response Fulford (2013, 544) argues that while value-based practice is not immune to this problem, such an outcome would be a *misuse* of the practice. Moreover, one way that value-based practice attempts to protect against this particular misuse is through the dissemination of a training program for front line staff regarding awareness of values, reasoning about values, knowledge of values and communication skills, e.g. eliciting and understanding values and resolving conflicts.

IV. Moral Expertise and Clinical Ethics

These two visions of the scientific and clinical expert suggest that making values explicit and the support of programs to expand involvement in these discussions, e.g. front line hospital staff, the non-expert public, can help to safeguard expertise against the erosion of value pluralism and allow us to understand better the basis on which experts disagree.

But how do these visions of scientific and medical expertise affect our understanding of the possibility of moral expertise, in particular the possibility of moral expertise as exercised by clinical ethicists?

The uncertainty that drives the use of judgment and values in scientific and clinical expertise is also present in morality: we are often uncertain about what we ought morally to do. As in medicine and science this uncertainty comes from incomplete information and the need to judge what aspects of a situation are and are not (morally)

relevant. For instance, different normative theories compete with one another and we have incomplete information about which one is better (R.G. Frey 1978, 50-1). Moreover, in part because moral theories compete with one another the relevant moral features of a situation are also uncertain, i.e. should we focus on the consequences of action? On principle? Does it matter that one of the people involved is my mother and not a stranger? Despite this uncertainty we are able to make moral judgments by relying on our experience and values. To be sure, Gesang (2010, 157) is correct: our experiences are in a dialectic with moral theory and our values. But it is only through this dialectic that we can come to decide how we ought to act.

Moral expertise is often taken to consist in knowing what one ought morally to do. Some such as Frey (1978, 50) and Gesang (2010, 153-9) have argued that whether or not one accepts the possibility of moral expertise turns on one's ability to justify the answer to the theoretical question "What makes right acts right?" In other words, the possibility of moral expertise requires us to ask whether or not some moral judgments are consistently better than others. But whether or not a moral judgment is a good one depends on the normative ethical theory that one uses to illuminate the relevant considerations in a situation. Thus moral expertise turns on whether or not we can justify the use of a particular normative theory as more adequate or correct than others. Our discussion of expertise in medicine and science, however, suggests that securing such a theoretical platform is not necessary for expertise.

Recall that one of the areas where scientists encounter uncertainty is in the characterization and interpretation of evidence and this requires them to draw on their experience and values to make a judgment about what theoretical framework is required.

Different experts will choose differently. In medicine clinicians encounter uncertainty in the characterization and interpretation of patient histories, physical symptoms and diagnostic test results. Clinicians like scientists must draw on their experience and values to make these judgments. Part of the experience and values on which they will draw comes from their training. As such osteopathic doctors, for example, may characterize and interpret their patients differently than allopathic doctors given their different theoretical backgrounds.

The gold standards of expertise, i.e. medicine and science, are rife with uncertainty and are characterized by a reliance on experience, values and judgment, which can lead to differences in theoretical orientation. We have argued that when clinical and scientific experts make recommendations these recommendations should be qualified with an understanding of the values and experiences that justify them. Thus medical and scientific expertise is less about "getting it right" or silencing non-experts, then it is about providing recommendations that make explicit the values and/or experiences that motivate them. Philosophers and other theorists who question the legitimacy of clinical ethicists because of the multiplicity of legitimate values and moral intuitions that affect what theory one applies to a particular moral decision and how one applies it are misguided. As we have shown expertise is consistent with the multiplicity of experiences and values, which can lead to very different judgments by experts in the same field regarding what one should (morally, practically, strategically) do.

To be sure, there are other concerns that one might have regarding moral expertise and the legitimacy of clinical ethics, which we have not considered in this paper. For instance, if, as we have argued, expertise is epistemically diverse, then what

is the basis on which a clinical ethicist is considered a moral expert? In other words, over what area of knowledge or skills do clinical ethicists rightfully claim mastery (see for insance, Rasmussen 2011, 649-61)? Complete answers to this question go beyond the scope of this paper, but here there are legitimate differences between medical and scientific expertise compared to the moral expertise of a clinical ethicist. While we have standards for the knowledge and skill sets that clinicians and scientists must master, there is disagreement regarding what characterizes the role of a clinical ethicist and thus what body of knowledge they need to master (see for instance, Aulisio and Arnold 2008, 417-24; Agich 2005, 7-24)

Nonetheless, to the extent that the debate about moral expertise and the legitimacy of clinical ethics turns on the provision of recommendations in the context of competing moral theories and a wide range of reasonable values and moral intuitions, we argue that moral expertise is possible and clinical ethics legitimate insofar as experts make clear the values and experiences that motivate their judgments. As moral experts clinical ethicists do not offer decisive opinions, but then neither do clinicians or scientists. To think otherwise is to misunderstand the nature of expertise.

V. Conclusion

We have argued that the gold standard models of expertise in medicine and science do not presuppose epistemic conformity. Expert recommendations in medicine and science are uncertain and characterized by experience, values and judgment. As a result when making expert recommendations clinicians and scientists should acknowledge the values and experiences that shape the construction and use of the body of knowledge that

constitutes their expertise. Thus the presence of competing moral theories and the wide

range of legitimate values and moral intuitions that characterize moral decision-making

are not fatal in the attempt to characterize a concept of moral expertise. This said, there

are other concerns about the possibility of a moral expert qua clinical ethicist that are not

addressed in this paper, namely over what area of knowledge or skills do clinical

ethicists rightfully claim mastery? This is an important question and should continue to

be pursued.

References

Agich, G. J. 2005. What Kind of Doing Is Clinical Ethics? *Theoretical Medicine and Bioethics* 26 (1): 7–24.

Archard, D. 2011. Why Moral Philosophers Are Not and Should Not Be Moral Experts. *Bioethics* 25 (3): 119–27. doi:10.1111/j.1467-8519.2009.01748.x.

Aulisio, M. P., and R. M. Arnold. 2008. Role of the Ethics Committee: Helping to Address Value Conflicts or Uncertainties. *Chest* 134 (2): 417–24. doi:10.1378/chest.08-0136.

Brecher, B. 2011. Which Values? And Whose? A Reply to Fulford. *Journal of Evaluation in Clinical Practice* 17 (5): 996–98. doi:10.1111/j.1365-2753.2011.01735.x.

Charlton, B. G. 1997. Restoring the Balance: Evidence-based Medicine Put in Its Place. *Journal of Evaluation in Clinical Practice* 3 (2): 87–98. doi:10.1046/j.1365-2753.1997.00097.x.

Cholbi, M. 2007. Moral Expertise and the Credentials Problem. *Ethical Theory and Moral Practice* 10 (4): 323–34. doi:10.1007/s10677-007-9071-9.

Cowley, C. 2012. Expertise, Wisdom and Moral Philosophers: a Response to Gesang. *Bioethics* 26 (6): 337–42. doi:10.1111/j.1467-8519.2010.01860.x.

Douglas, H. 2009. *Science, Policy, and the Value-Free Ideal*. 1st Edition edition. Pittsburgh, Pa: University of Pittsburgh Press.

E.J. Emanuel and L. Emanuel. 1992. Four Models of the Physician-Patient Relationship. *Journal of the American Medical Association* 267: 2221-6.

Evidence-Based Medicine Working Group. 1992. Evidence-based Medicine. A New Approach to Teaching the Practice of Medicine. *JAMA: The Journal of the American Medical Association* 268 (17): 2420–25.

Frey, R.G. 1978. Moral Experts. *Personalist* 59: 47–52.

Fulford, K. W. M. 2011. The Value of Evidence and Evidence of Values: Bringing Together Values-based and Evidence-based Practice in Policy and Service

Development in Mental Health. *Journal of Evaluation in Clinical Practice* 17 (5): 976–87. doi:10.1111/j.1365-2753.2011.01732.x.

Fulford, K. W.M. 2013. Values-based Practice: Fulford's Dangerous Idea. *Journal of Evaluation in Clinical Practice* 19 (3): 537–46. doi:10.1111/jep.12054.

Gesang, B. 2010. Are Moral Philosophers Moral Experts? *Bioethics* 24 (4): 153–59.

Goldenberg, M. J. 2006. On Evidence and Evidence-based Medicine: Lessons from the Philosophy of Science. *Social Science & Medicine (1982)* 62 (11): 2621–32. doi:10.1016/j.socscimed.2005.11.031.

Grahame-Smith, D. 1995. Evidence Based Medicine: Socratic Dissent. *BMJ* 310 (6987): 1126–27. doi:10.1136/bmj.310.6987.1126.

Greenhalgh, T., J. Howick, N. Maskrey, and for the Evidence Based Medicine Renaissance Group. 2014. Evidence Based Medicine: a Movement in Crisis? *BMJ* 348 (jun13 4): g3725–g3725. doi:10.1136/bmj.g3725.

Kaplan, D. M., D. B. Shipp, J. M. Chen, A. H. C. Ng, and J. M. Nedzelski. 2003. Early-deafened Adult Cochlear Implant Users: Assessment of Outcomes. *The Journal of Otolaryngology* 32 (4): 245–49.

Kennedy, A. 2013. Differential Diagnosis and the Suspension of Judgment. *Journal of Medicine and Philosophy* 38(5): 487-500.

Lancet. 1995. Evidence-based Medicine, in Its Place 346 (8978): 785.

Longino, H. E. 1990. *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry*. Princeton, N.J.: Princeton University Press.

McClimans, L. 2010. Towards Self-determination in Quality of Life Research: a Dialogic Approach. *Medicine, Health Care, and Philosophy* 13 (1): 67–76. doi:10.1007/s11019-009-9195-x.

Montgomery, K. 2005. *How Doctors Think: Clinical Judgment and the Practice of Medicine*. 1 edition. New York: Oxford University Press.

Rasmussen, L. M. 2011. An Ethics Expertise for Clinical Ethics Consultation. *Journal of Law, Medicine & Ethics* 39 (4): 649–61. doi:10.1111/j.1748-720X.2011.00632.x.

Rudner, R. 1953. The Scientist Qua Scientist Makes Value Judgments. *Philosophy of Science* 20 (1): 1–6.

Sackett, D. L., W. M. C. Rosenberg, J. A. Muir Gray, R. B. Haynes, and W. S. Richardson. 1996. Evidence Based Medicine: What It Is and What It Isn't. *BMJ* 312 (7023): 71–72. doi:10.1136/bmj.312.7023.71.

Shalit, R. 1997. When We Were Philosopher Kings: The Rise of the Medical Ethicist. *New Republic (New York, N.Y.)* 216 (17): 24–28.

Tong, R. 1991. The Epistemology and Ethics of Consensus: Uses and Misuses of 'Ethical' Expertise. *Journal of Medicine and Philosophy* 16 (4): 409–26. doi:10.1093/jmp/16.4.409.

Upshur, R., E.G. VanDenKerkhof and V. Goel. 2001. Meaning and measurement: an inclusive model of evidence in health care. *Journal of Evaluation in Clinical Practice* 7(2): 91-6

Varelius, J.. 2008. Is Ethical Expertise Possible? *Medicine, Health Care, and Philosophy* 11 (2): 127–32. doi:10.1007/s11019-007-9089-8.

Veatch, R. M. 2005. The Roles of Scientific and Normative Expertise in Public Policy Formation: The Anthrax Vaccine Case. In *Ethics Expertise History,*

Contemporary Perspectives, and Applications, edited by Lisa Rasmussen. Philosophy and Medicine 87. The Netherlands: Springer.