Imaging, Paternalism and the Worried Patient: Rethinking Our Approach

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Abstract
The Covid pandemic has taught many lessons, including the importance of mental health. The value of the radiologist in holistic patient care may be underestimated and underresearched. Barriers to the acceptance of imaging as an important component in reassurance may be rooted in old ideas minimizing the importance of mental health.

Résumé
La pandémie de COVID-19 nous a beaucoup appris, notamment l’importance de la santé mentale. La place du radiologiste dans les soins holistiques des patients peut être sous-estimée et ne pas faire l’objet de suffisamment de recherches. Les obstacles à l’acceptation de l’imagerie comme élément important pour rassurer le patient sont peut-être ancrés dans de vieilles conceptions minimisant l’importance de la santé mentale.

Keywords
breast imaging, paternalism, anxiety, mental health, screening, harms, value of radiology, #metoo, guidelines, shared decision making

Evidence is the foundation of all medical practice, but we use our intelligence and our humanity to synthesize evidence into practice. Modern guideline methodology recommends that guideline panels include not just epidemiologists and expert physicians, but allied professionals and lay people, especially patients.1 This is because medical practice and guidelines are recommendations developed for patients, not about patients. A patient’s feelings and opinion should be carefully considered in his or her care. The primary care provider helps synthesize vast quantities of information to aid the patient in his or her own care plan.

As evidence-based professionals we pride ourselves on performing appropriate investigations based on efficient use of resources and a careful balance between caution and pre-test probabilities. My own prejudice about “wasteful” breast pain investigation became obvious to me during April and May, 2020, in the doldrums of Covid, when we were trying very hard to minimize the number of patients in the clinic and we limited breast imaging to diagnostic cases only. Suddenly, it seemed a substantial proportion of my patients were presenting for investigation of symptoms that added yet another layer of suffering onto their immensely challenging situations. I started to see that isolated breast pain, while a low-level concern to a physician, is highly distressing to the patient. While education and reassurance are ideal for dealing with breast pain, I am sure that a simple imaging investigation is a comfort to both woman and healthcare provider, particularly when clinical breast examination is not possible.

I have only rarely seen “anxiety mitigation” or “patient is worried” as a written indication for medical investigation. In fact, this would be considered a bold admission by the referrer. Despite that, anxiety is likely directly or indirectly the origin of many of the requests for imaging investigation we see every day. As an example, tests are ordered to “rule out” pathology in the scenario of low pre-test probability scenarios such as fluctuant palpable lipomata and cyclical breast pain. The referrer knows this is unlikely to represent significant pathology and the diagnosis is often accurately predicted by the referrer on the requisition. Is this practice of investigating obviously benign clinical findings one that should be eradicated, or should we simply embrace the idea that we can occasionally alleviate a patient’s anxiety with a lab or imaging test?

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Is Anxiety for “Wimps”? 

When searching articles that discourage imaging for anxiety, it struck me that many were British, written in the 1990s.3,4 Have we allowed centuries-old patriarchal and colonial sensibilities (and perhaps the NHS) to colour our views of the value of diagnostic testing? Are we all held to the standard of the “stiff upper lip”? In this age of increasing sensitivity to mental health, why is situational anxiety still stigmatized and treated as a nuisance? When the patient cannot be reassured without testing should we just allow that patient to continue to feel anxiety? 

Guidelines that emphasize recall or “false alarm” anxiety as a harm, but ignore the reassurance that is received by normal screening in the overwhelming majority of patients (>90% for breast screening), demonstrate an obvious bias. The benefit of reassurance is trivialized in these analyses. In this paternalistic view, recall anxiety is enough of a harm that it should inhibit screening, but the negative emotional consequences of an avoidable late-stage diagnosis are not of concern. Only mortality is considered as the measure of screening success.

A study on chronic headache demonstrated that imaging resulted in improved anxiety at 3 months, although anxiety was similar between scanned and non-scanned groups at a year.5 Is it ethical to allow patients to wait a year to have a patient’s anxiety levels return to a level seen at 3 months in patients with imaging reassurance? Interestingly, this study also demonstrated lower overall healthcare expenses in the imaged group. This is intuitive. Patients anxious about chronic or recurring symptoms may make repeat visits for reassurance. In personal communication, a family physician told me that she has had patients who returned for multiple visits for investigation of vague abdominal complaints, only to be assuaged with a single normal abdominal ultrasound.

How many among us have had imaging or other testing to quell a nagging worry? Speaking amongst colleagues working in imaging, many of us admit that we have had an immediate improvement in quality of life when we have had a reassuring negative result from a diagnostic test performed on ourselves or our loved ones. Often this was even though we suspected (or hoped) that the result would be negative and had been reassured that the test was a “rule out”. If patients are informed of the potential harms of incidental findings, it should be considered quite reasonable to allow them to participate in the decision to undergo further testing.

#MeToo and The Rise of Empowerment

There is a long history of paternalism, racism and gender bias in medicine, including mental health and pain diagnosis.6 Times are changing, however, and we have seen political and social movements, such as #MeToo, #BlackLivesMatter and #TimesUp in opposition to longstanding hierarchical conventions. Perhaps we should use this opportunity to reflect upon these movements as they pertain to our relationships with our patients.

Terms like “empowerment” have been used to encourage the inclusion of patients in clinical decision-making, but the word “empowerment”, itself acknowledges an existing power differential. A large part of this power differential comes in the form of a knowledge differential. We use terms like “shared decision making”, but we understand the knowledge flow is very unidirectional. We can pay lip service to empowerment while steering the patient into a predetermined decision, based on the information provided to her.

Women aged 40-49 receive the greatest mortality benefit and have the greatest life-years gained from breast cancer screening,7 but this age group has limited access to screening as national and provincial practice guidelines result in decreased access in many jurisdictions. These guidelines claim that in this age group the harms outweigh the benefits of screening. On the one hand, the woman is putatively involved in decision-making, but on the other hand, the healthcare guidelines have already determined, on her behalf, that the anxiety outweighs the lifesaving benefits. By making this judgment for the patient are we not merely concealing our paternalism?

In formulating one set of guidelines, women were surveyed on how they felt about the risks versus benefits. The Canadian Task Force on Preventive Health Care performed a review of women’s values and preferences in preparation for their 2018 Breast Cancer Screening revision. In their conclusions they state “Provided with data indicating a wide variation in benefit-to-harm ratios, reductions in breast-cancer mortality appear to outweigh both [false positives] and overdiagnosis for most women. However, this finding was frequently in the context of incomplete or absent provision of information on all-cause mortality.”8 In an example of overt paternalism, the review group “moved the goalpost” when confronted with the choice made by the women surveyed. When women chose to screen despite possible harms, the authors concluded that the women did not have all the pertinent information and thus they did not actually know what they wanted. Sound familiar?

Paternalistic Manipulation of Terminology

The biased terminology we use to describe the outcomes of screening and other investigations are very telling. Anxiety over screening recall is called a “harm”, to be avoided. Yet anxiety related to pain and other symptoms may not be considered harm enough to be worthy of diagnostic testing. Benign biopsy is called “unnecessary”; however, one third of biopsies are malignant. Given that screening decreases Canadian women’s mortality to breast cancer by 40% overall and 44% for women in their 40 s,9 benign biopsy is a necessary part of the process of preventing avoidable late-stage diagnosis of breast cancer and the consequent poor outcomes.

In personal experience, many patients tell me they are pleased that we are being “overcautious” when doing a recall assessment or performing a biopsy, even when the results are likely to be benign. What is deemed “unnecessary” for the person writing a guideline may be very desirable or necessary
to the patient. Despite our desire to include patients in decision-making, normative statements and paternalism are built into the very language we use.

The Downsides of Testing

The downsides of investigation in low pre-test probability scenarios are obvious. Use of resources with little hope of finding pathology. False positives that lead to further worry, expense and occasionally, morbidity. Not all patients are reassured by investigations and a large part of the reassurance still rests on the relationship between healthcare provider and patient. Overdiagnosis, incidental findings and other risks of “creating disease” in otherwise well people must be acknowledged and discussed with patients. The acronym VOMIT (Victim of Modern Imaging Technology) was coined by Richard Hayward in BMJ in 2003 and serves as a caution to overinvestigation.

And of course, healthcare costs are not inconsequential. We need to be honest about costs and the role they play in making decisions, particularly when these decisions may make the difference between relative health and avoidable morbidity or early death. We must acknowledge that the cost of healthcare plays a role in deciding whether we choose to screen, order a test or perform a treatment. Whether or not we want to be gatekeepers, physicians have a responsibility to help ensure our healthcare system remains sustainable. As stated earlier, however, it is not entirely clear that reassurance investigations increase overall use of healthcare resources.

Where costs are, indeed, prohibitive we must be honest rather than manipulating evidence or making paternalistic decisions to steer advice to cheaper options. And where those decisions or recommendations have been made to ensure responsible use of financial resources, complete transparency should be demanded.

A Reasonable Compromise in a Changing World

Times have changed since many of the conventional ideas about patient involvement in decisions were formulated. Patients are now full participants in their own care. A decade ago it would have been unthinkable to give patients access to their own medical record, yet in 2021 this is becoming the norm. Paternalism is no longer tolerated.

It is no longer reasonable to think that investigations performed to alleviate situational anxiety are a dangerous waste. Patients may present with internet-fuelled anxiety resulting from what the physician views as relatively minor symptoms, but we know that one diagnostic study might rapidly alleviate the anxiety and diminish suffering. We have moved beyond the idea that physical medical pathology is the only patient concern that warrants healthcare expenditure. There is a place for imaging and laboratory investigation in the holistic treatment of the patient.

Is situational anxiety management an objectively bad use of resources? Verbal reassurance and patient education are, of course, the first line intervention for situational anguish around isolated breast pain and other distressing symptoms and this is often very successful. Sometimes, however, counselling may fail to reassure the patient. In this instance a primary care practitioner is faced with the choice of more extended counselling (which may or may not alleviate anxiety), releasing the patient from the visit without alleviating the anxiety or ordering a test to put the patient’s mind at ease.

There are occasions when a picture is literally worth a thousand words. In fact, a small questionnaire study hinted at the real benefit of imaging for reassurance. Both anxiety and perceived pain were lower after imaging for breast pain. If one is to view anxiety and pain as real suffering, we must also view reassurance as a material benefit.

Family physician colleagues and friends who speak to me about imaging have told me that they will occasionally order a test just to reassure the patient, but many confide this, as though they feel they are doing something they should not. When we view situational anxiety as a form of suffering, however, it seems far less unreasonable to perform an investigation to mitigate a patient’s worry.

Saving resources in imaging and other investigations while burdening clinicians with patient reassurance may no longer be a good trade off. The physician reassurance model was a better balance when human resources were not so strained. The modern primary care provider has a stressful workload and, in some jurisdictions, diminishing reimbursement. Moreover, the tele-health paradigm may continue, at least in part, after the pandemic is over. The old idea that patients should always be reassured verbally, without testing, may no longer fit the realities of modern medical practice.

I do not advocate for irresponsible overuse of imaging, particularly where higher doses of radiation are involved. For example, imaging for pulmonary thromboembolism can include expensive and high radiation dose CT scanning of the chest. This should only be done when well established and validated pretest probability estimation has been applied. I do, however, wish to use this moment to think about our role in paternalism, gender bias and dismissive attitudes to pain and anxiety. Additionally, patients’ agency and input are coming to the fore and the patient’s request for investigation may no longer be easily dismissed.

When there is so much being asked of referring practitioners, perhaps we can change the narrative so that referrers feel supported by imagers and feel a little less guilt occasionally relying on imaging to reassure patients. Referrers should feel free to include situational anxiety as an indication on the requisition. This would improve the ability of the specialist to put findings in context and perhaps even allow us to word reports carefully so as not to escalate anxieties. As specialists we should accept the history “patient worried” as a valid indication. Yes, there are downsides, but as long as patients are sufficiently warned about the risks, they should be able to consent to them.

While imaging for reassurance superficially seems to substitute a mechanical solution to a human problem, let us not
forget that, particularly in diagnostic breast imaging, the radiologist frequently communicates the results to the patient immediately. The radiologist often speaks to the patient personally in the clinical setting, allowing the patient to ask questions and receive immediate answers directly from an expert. Reassurance by the radiologist is a valuable and tangible benefit to the anxious patient and her primary care provider.

Conclusion

As physicians and experts, we must encourage responsible use of healthcare resources, but we must also advocate for our patients and even for our referrers. It is time for common sense, compassion and fairness to influence our interpretation of evidence. All healthcare providers should view reduction of suffering and even short-term improvement in quality of life as fundamental goals of care and responsible use of healthcare resources. More research into the economic impact of reassurance imaging is needed.

Our perception of suffering has been altered during Covid. The news is daily filled with stories of increased mental health concerns and spiking opiate fatalities. The pandemic has provided many lessons to all of us and has changed the world permanently. Among those changes, I hope that we have collectively gained some compassion and enlightenment.

There is value in reassuring the patient. Personal communication from the radiologist to the patient is a tangible benefit we add to patient care. As an imager, I hope to have gained a more holistic approach to emotional care for my patients. I encourage readers to consider viewing all forms of suffering as worthy of resources and to expand their perception of the role of imaging in patient care. We can and should advocate and care for our patients’ mental health as well as their physical health.

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