Non-compliance in orthopaedic surgery and its ethical challenges

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Summary
Non-compliance is described as “the degree to which patient behaviour (in terms of taking medication, following diets, executing lifestyle changes) is congruent with the recommendations of the health care provider. Non-compliance is a difficult problem, and can take many forms including patients not attending follow-up appointments and not taking prescribed medications. In trauma and orthopaedic surgery, the final outcome can be significantly compromised by poor compliance, resulting in morbidity to the patient as well as substantial financial implications to the health system. Knowing sub-groups of patients who are more likely to be non-compliant should enable us to predict those at risk of non-compliance in order to take necessary steps for improvement. In order to consider refusing treatment to a non-compliant patient there has to be robust ethical justification. All surgeons have a duty of care, which includes taking steps to improve patient compliance.

Introduction
Non-compliance is a difficult problem, and can take many forms including patients not attending follow-up appointments and not taking prescribed medications. In trauma and orthopaedic surgery, the final outcome can be significantly compromised by poor compliance, resulting in morbidity to the patient as well as substantial financial implications to the health system. It is likely that the cases we see are merely the tip of the iceberg. Ethical challenges inevitably arise as a result of non-compliance, which affects patients as well as treating surgeons. Directly or indirectly, there remains a wide gap between doctor–patient bonding in such situations in spite of offering medical care and formal treatment. We need to explore ways to improve compliance during what often becomes a counter-productive situation.

What is non-compliance?
Non-compliance is described as “the degree to which patient behaviour (in terms of taking medication, following diets, executing lifestyle changes) is congruent with the recommendations of the health care provider.” Non-compliance can take several forms including failing to attend follow-up appointments, not adhering to post-operative instructions, not taking prescribed antibiotics and not complying with physiotherapy regimen. Non-compliance...
does not always result in poorer outcomes; however, this is a clear example of lack of compliance leading to a compromised outcome, chronic morbidity and disability. It has been suggested that the criticised term ‘non-compliance’ (described as being too authoritarian) be replaced by terms such as ‘adherence’ and ‘concordance’. The proponents of this terminology would argue that it suggests the problem lies in the doctor–patient relationship, not merely with the patient. Others would argue that simply changing the word used to describe the concept is a semantic solution that offers no additional meaning.

Patients’ perception

Patients’ priorities are different from their health care providers, therefore the patient places a higher value on something other than the surgeon’s primary objective; some patients do not understand their illness or the importance of following instructions given to them; others may not be in a position to follow these instructions. There are some patients who do not believe or trust their surgeons, whereas other non-compliant patients may simply have difficulty with life organisation. In addition, there are those patients who believe that their health care providers are solely responsible for their health and do not appreciate that they themselves have a crucial role to play.

It should be remembered that a small number of patients deliberately do not comply with treatment and seek to prolong their illness. Sometimes these patients have deep-rooted psychosocial difficulties and subconsciously may not want to get better. Alternatively, there are patients who seek financial or emotional rewards via ill-health. Both these groups of patients are very difficult to manage effectively and challenging them often results in further deterioration in the situation.

Patients at risk

There are sub-groups of patients who are more likely to be non-compliant. These include younger patients as well as those living in social isolation. Those who misuse drugs or alcohol are also much more likely to default from treatment programs, as are those with emotional or mental health difficulties. Some people simply forget to follow advice or find it inconvenient to attend appointments or adhere to physiotherapy programs. To a certain extent, knowing this should enable us to predict those at risk of non-compliance in order to take necessary steps for improvement.

Surgeon’s role in non-compliance

The patient alone cannot be blamed for non-compliance. It is the clinician’s responsibility to ensure patient understanding of the disease and the rehabilitation process, in language the patient understands. Non-compliance can occur simply because the patient does not understand the importance of following the surgeon’s instructions. Some patients also do not believe or trust their surgeon and this may be indicative of a poor doctor–patient relationship.

When faced with non-compliance, irritation on the surgeon’s part can result in further deterioration in the relationship with the patient, perpetuating the problem. If a patient is labelled “non-compliant”, it can often result in a prejudiced attitude towards the patient, especially when different health care professionals are involved in the same patient’s care. The non-compliant label is passed on and can result in preconceived misjudgements about the patient. The patient may be treated by several doctors and by doctors of varying experience, there can be disparity and discrepancy in the treatment advice given and the way urgency of rehabilitation explained. It is easy to overrule on the basis of non-compliance of the patient, nevertheless, one should look into it in more depth and detail.

Non-compliance and health system resources

In health-care systems worldwide, it is inevitable that resource scarcity can contribute to non-compliance. Examples would be a significant wait for clinic appointments or surgery, delays in receiving physiotherapy or having to travel large distances for treatment. Another problem is when patients are not given enough support for co-existing medical problems whilst undergoing orthopaedic treatment. A typical example would be failing to provide a detoxification and support programme for those with substance misuse problems. A vicious cycle can occur in the form of non-compliance and being neglected in the wards and clinics. Patients who have poor experiences during hospital visits may be less likely to attend for further appointments. Lengthy clinic waiting times and a poor clinic environment are areas which could be improved. Financial restrictions on the patient may result in them not being able to travel to treatment centres, or not being able to pay for necessary treatment, depending on the type of healthcare system.

What should we do?

As the causes of non-compliance are multi-factorial, so too must the solutions be. Clear communication with regular reinforcement of the therapeutic goals is the mainstay of achieving compliance. All the health care professionals who have contact with the patient must clearly and consistently reinforce the message to the patient. Patient education is vital and could utilise verbal, written and audiovisual materials. One effective strategy, if the patient agrees, is to involve family members, friends, etc. They can be a useful source of encouragement and may help patient compliance. Written or telephone reminders to prompt patients to attend for physiotherapy, clinic appointments or even surgery are useful as some patients simply forget their appointments. An efficient communication infrastructure is needed for this to be successful and is unfortunately not always available. Targeting high risk non-compliant groups should be employed. Those with drug and alcohol problems may be more co-operative if a detoxification programme is provided, which should continue in the out-patient setting. Conservative treatment may be preferable in some situations. Drug treatment tends to have better compliance if long-acting, infrequent dosing preparations are used so
these should be prescribed where possible. Encouraging and achieving lifestyle changes can be very difficult. Weight loss and stopping smoking have positive benefits on the outcomes of orthopaedic surgery. Peer support groups, drug therapy and psychological support may all play a part.11 The clinic is one area where big improvements could be made. If patients’ expectations are modified and they are given realistic information about appointment waiting times and time spent in clinic (including investigations), patients may be more likely to attend.12 A pleasant clinic environment with sufficient, comfortable seating may also help. Although logistically challenging, co-ordinating clinic visits with physiotherapy appointments, imaging investigations and so on would minimise patient inconvenience and perhaps reduce non-attendance rates. Finally, the surgeon has a crucial role to play. He/she must not discharge all responsibility for compliance onto the patient. The surgeon must constantly educate and reinforce the importance of compliance in achieving the desired outcome. The surgeon must not be discouraged from attempting to improve compliance simply because another clinician has labelled the patient non-compliant. A good rapport fosters a healthy doctor–patient relationship which undoubtedly improves compliance.

Patient non-compliance can be very frustrating for surgeons. All physicians have a duty of care and cannot refuse to treat patients in need of urgent medical care. Some ethical concepts however suggest that care could be refused to patients in a non-compliant situation and must be backed up by sound ethical argument.

**Patient autonomy in decision making: when does it become unsafe?**

Patient autonomy has become the most overwhelming principle in medical ethics. The first thing to establish would be, is the patient autonomous. There must be several components present for this to be the case. The patient must be fully informed, making a voluntary decision about their treatment and this decision must be based on reasoning. If any aspect is missing, then the patient may be said to have a lack of decision-making capacity, that is to say may be incompetent to make decisions.14,15 With an incompetent, non-compliant patient, the principle of beneficence can be used to justify treatment, so long as this treatment is recognised as reasonable by an appropriate group of peers. This principle is fairly easy to apply in certain groups of patients such as children, those with mental illness or those with acute confusional states. Here, the concept of paternalism16— which is usually unacceptable in this age of patient autonomy—may be safely applied. The grey area is that non-compliant patients are often deemed competent therefore further ethical principles have to be applied to their subsequent management.

**Refusal of treatment to a non-compliant patient: is it ethical?**

In order to consider refusing treatment to a non-compliant patient there has to be robust ethical justification. The concept of futility can be helpful in refusal of treatment. Calling a treatment futile seems like a cold statement of fact rather than simple refusal of treatment without reason. The difficulty is that a particular treatment may be aiming to be curative and the surgeon may know that it is unlikely to succeed, yet if a patient (or their family) gain even a small improvement from the treatment, then it is difficult to call the treatment truly futile. Furthermore, how is likelihood of success versus failure quantified? Previous experience is not always applicable to the current situation and a percentage likelihood of treatment success cannot realistically be assigned to each patient. Therefore, with this in mind, treatment cannot be refused on the grounds of futility alone. Non-maleficence comprises a large part of the moral justification for refusing treatment. Doing no further harm is vitally important and it does not just refer to the patient. If treating a patient will do harm to others (family, staff members, other patients) it presents a morally challenging situation. A surgeon’s duty is to his patient, compliant or otherwise. A stronger case may be made for refusing treatment if it harms others but is not in itself justification for treatment refusal. It may be that changing from curative to maintenance treatment may cause less harm and be less futile, in the context of changing therapeutic goals (improvement rather than cure).17

One area that is always difficult to reconcile with sound ethical practice is financial considerations.18 This can be more problematic in a free health care system, where the surgeon is in the unenviable position of allocating scarce resources to the most needy. Decisions of this nature are seldom clear-cut, though refusing expensive, futile treatment in a non-compliant patient can be more easily justified than where the treatment is inexpensive. Surgeons also fear litigation in the difficult circumstance of a non-compliant patient. The possible resultantly financial penalties undoubtedly influence decision making about these patients, in spite of ethical considerations.19 Whether it was the patient’s fault or the surgeon’s fault? It can be justified or counter-justified easily, however, without any net gain.

**Conclusions**

With some patients, non-compliance cannot be improved and refusal of care may be contemplated. In such a situation, there must be a sound ethical argument to justify refusing treatment and it must not be simply based on irritation with the patient’s unwillingness to comply. If it is, the clinician will have failed in their duty of care to the patient and may leave themselves open to litigation. All surgeons have a duty of care, which includes taking steps to improve patient compliance.

**References**