

Patient counselling on prescribed medication: Relevance to health-Care training

Opinion

It is of significant concern to clinicians that patients often do not understand the importance of drug therapy and thereby do not adhere to the prescribed regimens. This eventually leads to suboptimal clinical outcomes. Poor medication adherence and non-compliance are particular issues with those patients who have multiple chronic ailments and must manage a number of different medications. Although these terms are often used interchangeably, they are not synonyms. Medication adherence is the act of filling new prescriptions or refilling prescriptions on time; whereas medication compliance refers to the act of taking medication on schedule or taking medication as prescribed.¹ It is estimated that one third to one half of all medicines prescribed for long-term conditions are not taken as recommended.² The problem is certainly multifactorial, ranging from patients struggling to understand instructions provided by health-care staff, to fear of adverse effects or perceived lack of efficacy and several such misconceptions regarding their medications. It is likely that interventions to improve effective patient communication will increase patients' understanding of their medications and avoid assumptions.³ Good communication between healthcare providers and patients has been repeatedly cited as a prominent element in medication adherence and compliance.^{4,5}

As physicians are expected to provide patients with appropriate information about their medicines, they need to be suitably trained in this exercise. The British Pharmacological Society has recognised the relevance of this skill and its "guidance for good prescribing" includes patient education on the prescribed medications as an integral part of the prescribing role of a practitioner.⁶ It is important that this aspect of prescribing is incorporated in the training of health-care students. The General Medical Council (GMC) has outlined outcomes for medical graduates⁷ which incorporate the professional skill of being able to "provide patients with appropriate information about their medicines". Wiernik⁸ has reported a reduction in formal pharmacology training in medical and nursing schools in the US which can affect several prescribing related skills including patient education on medications. Insufficient pharmacology education can lead to less prepared future clinicians leading to rise in the incidence of adverse drug reactions and inappropriate prescribing. Hence, acquiring this skill of effective patient education regarding medications should be a learning objective of undergraduate medical course.

Currently, education on prescribed medications is primarily given through patient information leaflets [PILs] which are loaded with facts that most patients would neither understand nor remember. Interestingly, a Health Technology Assessment in 2007 found that majority of people didn't value the written information that they receive particularly, the package inserts.⁹ Thus, it is important that in addition to PILs, the prescribers are trained suitably to communicate essential drug related information to their patients. Direct face to face encounters between patients and healthcare personals is also an opportunity for patients to raise any concerns or clarify doubts that they may have regarding their medication. Drug specific booklets contain exhaustive data relevant to the particular therapy which interested patients could certainly refer to. However, it would be unreasonable to expect undergraduate students to study these information loaded booklets when the medical curricula worldwide are already being questioned regarding the factual overload and the content thickness

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in most courses. Information overload in undergraduate curricula and proliferation of new drugs have been recognized as two of the major contributing factors leading to irrational prescribing and medication-related incidents.¹⁰

Medical, pharmacy and nursing students need to ensure that relevant information regarding the safety and efficacy of prescribed drugs as well as the practical issues in relation to drug intake have been discussed with their patients. Healthcare training institutes should afford practical opportunities for students to interact with both simulated and real patients to develop their specific drug-related counselling abilities. Despite the acknowledged relevance of this professional skill by recognised bodies, there is limited progress in the area possibly, due to few available learning resources targeting undergraduate students. Interested pharmacology and pharmacy faculty could help students through developing suitable educational resources which assist students in practising their consultation skills. Joint interdisciplinary education for pharmacy and medical students has been proposed to improve knowledge and skills of pharmacology and pharmacotherapy for both groups of students. A cross-sectional Dutch study¹¹ reported that pharmacy students had better knowledge of basic pharmacology than medical students; while the latter group had better prescription writing skills. The two groups of students had similar knowledge of applied pharmacology. Interprofessional learning sessions could potentially provide opportunities for the two professionals to learn symbiotically from each other. This also trains students in principles of shared decision making and coordinated care for patients, which is valuable for their future practice.

Advances in technology has made it possible to develop online tutorials, quizzes and teaching workshops which students may access in the library or on their personal devices. Educational material should highlight the relevance specific aspects of drug therapy which can affect patients' compliance. For example, if a patient has been prescribed a selective serotonin reuptake inhibitor (SSRI) or a disease modifying anti-rheumatoid drug (DMARD), it is important to inform the patient of the delayed onset of action with such agents. An uninformed patient may get impatient and lose faith in the medication, or the doctor or both. Likewise, patients need to be told whether the medication should be taken with meals or empty stomach. Gastrointestinal tolerability of Metformin and erythromycin is improved dramatically when taken with meals, resulting in better patient compliance. Drugs like proton pump inhibitors (PPIs) or flucloxacillin on the other hand, work better when ingested empty stomach. Failure to inform the patient of these practical details could result in reduced efficacy of these medications.

It is also considered a good practice to warn patients of potential side-effects of prescribed medications and also what to do in the event of those effects. Some adverse drug reactions (ADRs) might require discontinuation of the drug while others subside with time and gentle reassurance to cope with the inconvenience might be sufficient. A better informed patient is likely to be more adherent to the therapy than someone caught unaware. Some ADRs also need to be reported to the relevant regional agencies like for instance we have the yellow card scheme run by the Medicines and Healthcare Regulatory Agency (MHRA) in the UK. MHRA collects data on the safety profile of drugs and issues recommendations on appropriate use of all therapeutic agents including complementary and herbal products.¹² It is of utmost importance that healthcare students are made aware of these protocols for their future clinical practice. Educating patients on the possible side-effects without causing anxiety and scaring them off from actually taking the drugs is a skill that students acquire with practice. It is therefore, the responsibility of the course coordinators to include opportunities for students to practice and develop these skills.

Formative objective structured clinical examination (OSCE) stations involving simulated or real patients might be another useful strategy for providing students with specific opportunities to develop counselling abilities. These stations could particularly target high risk medications like warfarin, steroids, insulin and multiple antimicrobial regimens, where medical, nursing and pharmacy students could practise counselling the patients on various areas of their drug therapy. Stations may be set up to demonstrate appropriate use of inhalers and transdermal patches. Students should be able to advise patients regarding alcohol abstinence (as may be required in a patient who is prescribed metronidazole) or alcohol limitation in a patient on warfarin. Students also need to remember to warn patients of the consequences of abrupt withdrawal of certain drugs (eg. beta-blockers or systemic steroids). Laboratory investigations with certain medicines like Methotrexate can not only help in drug tolerability but also avoid future litigation. Therapeutic drug monitoring of antiepileptic, lithium or immunosuppressant's help to tailor and titrate the dose as per individual patient.¹³ The significance and frequency of these tests should be part of patient counselling on prescribed drugs.

Pharmacology is a fact based subject, and new data and drugs that are constantly added to the medical literature can overwhelm even the senior physicians sometimes. Hence it is not surprising if healthcare students find it tough to cope with the vast amount of information that is available on medications. This may be frequently changing and conflicting too. Students are expected to apply their knowledge of pharmacology and exercise practical judgement to prioritise which bits of information are relevant for the particular patient. They should avoid bombarding the patient with unnecessary details which they don't need to know and sometimes cannot even comprehend. It is a useful skill for future clinical practice to judge the health literacy level of individual patients and accordingly tailor the amount of information to impart.¹⁴ "Chunk and Check" and "teach back" are useful tools that students may utilize. The former guides on how to fragment information in small chunks to counsel the patient and the later stresses the importance of making the patient repeat in their own words what they have been just told by the healthcare professional to check if the information understood by the patient is accurate.^{5,14}

Medical, nursing and pharmacy graduates regularly interact with patients in clinical settings and they need the essential skill of effective and meaningful patient communication. To conclude, we may assert that it is the responsibility of curriculum coordinators to ensure that young professionals are trained in educating patients on prescribed drugs. This should not only add value to patient encounters but also contribute to improving patient compliance, efficacy of drug treatment and therapeutic outcomes.

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Conflict of interest

The author declares that there is no conflict of interest.

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