

**The Blind Spot of Polypharmacy: Bridging Western Medicine and Traditional Chinese
Medicine**

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Abstract

Polypharmacy among elderly Hong Kong patients is compounded by fragmented care across Hospital Authority outpatient clinics, private general practitioners, and Traditional Chinese Medicine (TCM) practitioners. Despite the Electronic Health Record Sharing System (eHRSS), TCM prescriptions remain largely excluded from centralised records, creating dangerous blind spots for herb-drug interactions. Warfarin potentiation by danshen and ginkgo highlights the potential severity of these risks. This essay examines these clinical hazards within Hong Kong's unique healthcare landscape and proposes a structured, culturally competent medication screening protocol for time-pressured outpatient consultations, alongside systemic recommendations for integrating TCM data into electronic health records.

(97 words)

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Introduction

Hong Kong's elderly population occupies a uniquely precarious position within its dual-track healthcare system. On one side stands a publicly funded Hospital Authority (HA) network managing the majority of chronic disease burden; on the other, a thriving private sector and a deeply embedded tradition of TCM. For many older patients, navigating these parallel pathways simultaneously is common practice. However, the consequence is a silent epidemic of polypharmacy, one whose most dangerous dimension remains largely invisible to the physicians responsible for patient safety: herb-drug interactions. That invisibility is not merely a technical failure. It is an ethical one. The principle of non-maleficence cannot be discharged by clinicians who do not know the full picture of what their patients are taking.

The Scale of the Problem

Studies conducted in Hong Kong estimate that around one in four patients attending outpatient services concurrently use both Western Medicine (WM) and TCM, a proportion that rises among older patients with chronic non-communicable diseases [1]. Yet, a systematic review found that few patients volunteer their herbal use to their WM doctor, citing beliefs that herbs are “natural” and therefore safe, or fearing dismissal by clinicians unfamiliar with TCM [2]. This fear is not unfounded: WM practitioners have historically received minimal education in herbal pharmacology, leading to frequent oversight of complementary therapies. Consequently, this disclosure gap is not merely a communication failure – it is a systemic one, reinforced by the architecture of Hong Kong's Electronic Health Record Sharing System (eHRSS).

Introduced in 2016, the eHRSS was designed to aggregate patient records across HA hospitals, private practitioners, and specialists onto a single platform [3]. In practice, the integration of TCM data remains critically incomplete. Private TCM practitioners are not mandated to participate in the eHRSS, and uptake among those who are eligible has been limited; studies of Chinese medicine practitioners' attitudes toward the system consistently identify inconsistencies between WM and TCM medical nomenclature, dosing conventions, and preparation formats as significant structural barriers [4]. The result is a clinical record that presents the illusion of comprehensiveness while concealing the very prescriptions most likely to interact with warfarin, digoxin, or chemotherapeutic agents.

Herb-Drug Interactions: Known and Underestimated

The pharmacological mechanisms underlying herb-drug interactions are well-established in the literature, even if their clinical uptake remains inadequate. Warfarin, among the most commonly prescribed medications in Hong Kong's elderly population, is particularly vulnerable. Danshen (*Salvia miltiorrhiza*) inhibits platelet aggregation and CYP2C9-mediated warfarin metabolism, leading to excessive anticoagulation and potentially fatal haemorrhage [5]. Similarly, St John's Wort is a potent CYP3A4 inducer that can reduce warfarin, ciclosporin, and antiretroviral plasma concentrations by over 50%, precipitating graft rejection or virological failure [6].

Ginkgo biloba, prized in TCM for cognitive enhancement, carries meaningful antiplatelet activity and has been associated with spontaneous intracranial haemorrhage in patients on aspirin or clopidogrel [7]. Huang qi (*Astragalus membranaceus*), routinely prescribed by TCM practitioners to elderly patients with chronic fatigue or immune deficiency, exhibits immunostimulatory properties that may antagonise immunosuppressive regimens in transplant recipients [8]. These interactions are not theoretical curiosities – they

are documented causes of preventable hospital admissions. The HA's pharmacovigilance infrastructure records herb-related adverse events, yet systematic under-reporting means the true burden of herb-drug interactions in anticoagulated patients almost certainly exceeds what clinical records capture.

The Five-Minute Consultation: A Structural Barrier

The standard HA general outpatient consultation averages just 6.7 minutes [9]. Within this window, a physician must review interval symptoms, adjust medications, order investigations, and address the patient's agenda – leaving little time for a comprehensive medication history that includes TCM. Linguistic and cultural factors further complicate communication. Many elderly patients communicate primarily in Cantonese dialects and may use colloquial or regional names for herbs that a physician trained exclusively in WM cannot recognise. The traditional framing of medication history as “what drugs are you taking?” implicitly excludes herbs, rendering the question itself a structural barrier to disclosure. Yet time pressure does not dilute the ethical obligation of non-maleficence; it demands sharper prioritisation. The professional duty to actively seek clinically relevant information rather than wait for patients to volunteer it is not suspended by a busy clinic list.

An Ethical Imperative

The failure to elicit a complete medication history is not merely a clinical oversight; it is an ethical breach. Beauchamp and Childress's four principles of biomedical ethics provide a clear framework for understanding why. Non-maleficence demands that clinicians actively avoid causing harm, not simply refrain from deliberate injury; a physician who prescribes warfarin without enquiring about concurrent danshen use has not met this standard, regardless of the time pressure under which they operate. Beneficence requires that clinicians

act in the patient's genuine best interest, which presupposes a complete picture of what the patient is taking. Furthermore, autonomy is meaningless if the clinical encounter does not create the conditions for honest disclosure. And justice demands equitable care: elderly patients who rely on TCM should not face a higher risk of preventable harm simply because the system was designed without them in mind. Taken together, these principles do not merely support reform. They require it. A health system that tolerates predictable, preventable herb-drug interactions is one that has subordinated its ethical obligations to institutional inertia.

A Proposed Protocol: The TCM Medication Screen

Addressing this risk within the constraints of a brief consultation requires a structured and culturally competent approach. Crucially, this is also a matter of shared decision-making: patients cannot meaningfully participate in choices about their care if their clinician lacks a complete picture of what they are taking. The following three-step TCM Medication Screen is proposed as a practical framework for HA outpatient physicians.

Firstly, normalise the question. Instead of asking “are you taking any herbs?”, physicians should open with a culturally affirmative framing: “Many of our patients also see a Chinese medicine practitioner or take herbal supplements. Can you tell me about anything like that you may be taking?” This signals receptivity and reduces the social barrier to disclosure. Normalising such treatments would encourage voluntary disclosure.

Second, focus on high-risk interactions. Given time constraints, the physician does not need to review every herbal ingredient. Instead, a targeted screen focusing on the most clinically significant interactions – compiled into a laminated reference card or integrated into the HA clinical workstation – would direct inquiry toward patients on anticoagulants, antiplatelet agents, immunosuppressants, narrow therapeutic index drugs, and chemotherapy.

The HA Drug Office could maintain and update this list in collaboration with the Hong Kong Chinese Medicine Council.

Lastly, document comprehensively and flag digitally. TCM products disclosed by patients should be entered into the eHRSS using a standardised TCM herb field, triggering an automated interaction alert against the patient's WM prescriptions. This requires investment in interface development and in training clinical staff to enter and interpret such alerts.

Systemic Recommendations

Beyond the consultation room, systemic change is required. The existence of the Hong Kong Herb-Drug Interaction Database (CHDID) demonstrates that the clinical infrastructure is already partially in place [10]. However, as a standalone resource, its utility relies on the assumption that patients must first volunteer their TCM and herbal medicine use before a physician can think to consult it. Integration of the CHDID into the eHRSS would transform herb-drug interaction checking from a reactive process into a proactive safeguard. There is also a deontological argument for reform: a health system that structures its records in ways that predictably permit harm cannot claim to prioritise patient welfare.

Medical education must also adapt. The MBBS curriculum at HKUMed already includes an introduction to TCM; expanding this to include practical herb-drug interaction pharmacology and communication skills for eliciting TCM history would equip graduating physicians with the tools their patients require. Continuing medical education programmes for practising clinicians should incorporate similar modules, prioritising high-risk specialties such as haematology, cardiology, oncology, and transplant medicine.

Conclusion

The blind spot of polypharmacy in Hong Kong is not simply a matter of patient non-disclosure or physician ignorance. It is the product of a healthcare system designed around a

single pharmacological paradigm, operating within a society that has always practised two. Closing this gap demands practical clinical openness, structural reform in electronic records, and a willingness to treat TCM not as a peripheral curiosity but as a co-prescribing partner whose products enter the same bodies, bind the same enzymes, and compete for the same narrow margins of therapeutic safety. The five-minute consultation is a constraint. It is not an absolution.

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