

Prescribing safety in primary care

Comparing the United Kingdom and Saudi Arabia

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ABSTRACT

في أغلب الأحيان، تنتهي الاستشارة الطبية في الرعاية الصحية الأولية بوصف الدواء، إلا أنه يجب الحرص على متابعة احتمالات وجود أخطاء في الوصفات الطبية، وخطر ذلك على المرضى. كما يجب أيضاً اتخاذ الإجراءات الوقائية اللازمة للحفاظ على سلامة المرضى في هذه المواقف. ويقع واجب الحفاظ على الصحة العامة على عاتق صنّاع القرار والمتخصصين في مجال الرعاية الصحية الأولية. تهدف هذه الدراسة إلى المقارنة والتقييم الدقيقين لوثائق السياسة العامة، والمبادرات، والتوجيهات التي تم إصدارها للرفع من مستوى الخدمة المقدمة ولسلامة الوصفات الطبية في الرعاية الصحية الأولية من أي أخطاء في كلا من المملكة المتحدة من جهة، والمملكة العربية السعودية من جهة أخرى. كما تهدف هذه الدراسة أيضاً إلى وضع النقاط والمقترحات التي يمكن إتباعها لتطوير سلامة الوصفات الطبية في كلا البلدين.

Most consultations in primary care end with a prescription for medication. As a result, the potential for error in prescriptions and the potential harm to patients must be carefully considered and action taken to increase the safety of patients in these situations. Policy makers and health professionals have an obligation to protect public health. This review aims to compare and critically assess the main policies, initiatives, and guidance that have been developed to improve the safety of prescribing in primary care in the United Kingdom and Saudi Arabia. The report also suggests particular areas of need that might be addressed to enhance the safety of prescribing in the 2 countries.

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Within the past decade, the government of the United Kingdom (UK) has shifted its priorities for the delivery of health care within its National Health Service. Incorporating the concept of quality into every aspect of health care, they have given the issue of patient safety prominence. Reports published in 2000, *An Organization with a Memory*, and in 2001, *Building a Safer National Health Service* (NHS), pledged to monitor and reduce occurrences of medical errors, placing emphasis on prescribing.^{1,2} Since then, several initiatives and forms of guidance have been developed to extend these aims, and embed the concept of safety into practice. In the Kingdom of Saudi Arabia (KSA), this concept is emerging as part of the overall move to increased quality of care, and several studies on prescribing have been performed. In 1996, a study on quality of prescribing in primary care found an average of 3.2 errors per prescription, and potential hazards in 69% of prescriptions, such as missing important information.³ A comprehensive review of the quality of primary care in KSA, conducted in 2005, assessed several aspects of care, among them, adherence to prescribing guidance and knowledge of evidence-based medicine, and how these issues affect patient safety.⁴ With the importance of patient safety and potential lessons to be learnt from approaches in different countries in mind, a systematic review of literature was performed to compare and critically assess the main policies, initiatives, and guidance that have been developed to improve the prescribing safety in primary care in the UK and KSA.

In this review, a 'policy' was defined as an official document published by a government, or a recognized body on behalf of a government, outlining goals and plans for services; an 'initiative' was defined as 'a new action or movement, intended to solve a problem',⁵ and 'guidance' was defined as a resource or form of advice used by health professionals on how to conduct practice when prescribing; handbooks, manuals, decision support, information, or others.

Identification and selection of relevant studies.

The reviewers identified literature from 1997 - 2007 relating to patient safety and prescribing in KSA and the UK. Policy documents from health care authorities, departments and ministries of health were included, as well as manuals, and other forms of guidance and initiatives aimed at improving prescribing safety. The main method used for the systematic review was a search of 6 electronic databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), Health Management Information Consortium (HMIC), The Intute Consortium (INTUTE), Biomedical and Pharmacological Database (EMBASE), British Nursing Index (BNI) and Biomedical and Bibliographic Database (MEDLINE). Terms related to primary care, prescribing, quality, or patient safety were used to search each database. Language was restricted to English and Arabic. All references were exported electronically to a reference manager (Endnote version no. 10) database. Four journals were hand-searched: British Medical Journal, British Journal of General Practice, Annals of Saudi Medicine, and the Saudi Medical Journal. Potentially relevant healthcare websites were also searched.

Study selection. Studies were selected in 2 stages. The first stage included the database search, hand search and supplementary searches. Approximately 594,843 articles were identified from the electronic databases. The total number of articles assessed was

87,244, and the total number of abstracts assessed was 3446. At the end of stage one, only 2758 articles were included from the electronic databases. Four hundred and three articles were identified from the hand search, and 1208 articles from the supplementary search. One hundred and fourteen articles were recommended by colleagues, but only 70 were included. At the end of the first stage, the reference manager recorded 4439 articles (Table 1). In the second stage, duplicates were manually removed from the reference manager, leaving 2039 articles. Abstracts were scanned and items were categorized by topic as policy, initiatives, or guidance. The bibliographies were scanned to find a further 5 items of related literature, and when the abstracts of these 5 were scanned, only 2 were selected. A final list of titles was developed, containing 550 articles. The selection criteria were stringently applied, leaving 76 articles, and these were retrieved as full text. Upon reading each article carefully, only 36 were ultimately selected, and tables were created to outline each article, and then each was abstracted into the appropriate tabulated format to assist the synthesis and comparison. Tables were then grouped by topic and synthesis was initiated. The results of the UK and KSA were grouped separately, and within each of the 2 groups, 3 subsets of policy, initiative, and guidance were established.

Results from the UK. There were 11 documents on policy, 12 documents on initiatives, and 8 on guidance in the UK.

Table 1 - Articles identified, reviewed, and exported from each search.

Source	Total hits (Combined terms)	Titles assessed	Abstracts assessed	Exported to endnote
<i>Electronic databases</i>				
CINAHL	34787	34787	1844	769
HMIC	10672	10672	309	717
INTUTE	1862	1862	114	58
EMBASE	6302	6302	349	286
BNI	7033	7033	457	512
MEDLINE	534187	26588	373	416
<i>Hand search</i>				
British Medical Journal	-	6017	-	305
British Journal of General Practice	-	-	-	67
Saudi Medical Journal	-	-	-	17
Annals of Saudi Medicine	-	-	-	14
Bibliographies of retrieved articles	-	-	-	-
Supplementary searches	-	-	-	1208
Recommended by colleagues	-	114	114	70
Total	594843	93375	3560	4439
CINAHL - Cumulative Index to Nursing and Allied Health Literature, HMIC - Health Management Information Consortium, INTUTE - The Intute Consortium, EMBASE - Biomedical and Pharmacological Database, BNI - British Nursing Index, MEDLINE - Biomedical and Bibliographic Database				

The National Institute for Clinical Excellence and the National Service Frameworks. In 1997, the Department of Health issued *The New NHS: Modern, Dependable*,⁶ which heralded the establishment of the National Institute for Clinical Excellence (NICE), and introduced the concept of the National Service Frameworks (NSF) as a method of upholding quality standards. The National Institute for Clinical Excellence was established as a body that would guide the NHS and provide a sound evidence base to health professionals.⁶ The National Institute for Clinical Excellence is an authority on guidance,⁷ and its purpose is to ensure that the evidence used in practice is high quality and updated for safety. The National Institute for Clinical Excellence issues guidance on health technologies and drugs, reviewing clinical trials evidence, and using appraisal processes to devise recommendations, and disseminates throughout the NHS.⁸

Evidence Based Medicine, Clinical Governance and Nurse Prescribing. In 1998, *A First Class Service: Quality in The New NHS*,⁹ introduced the concept of evidence-based medicine into practice, along with the concept of clinical governance as a means to continuously improve quality of care. In 1999, the Review of Prescribing, *Supply and Administration of Medicines*¹⁰ decreed that other types of health professionals could become licensed prescribers of medication. To introduce the scheme, a new prescribers advisory committee was formulated to oversee its implementation. As part of the continued government plans to allow different types of health professionals to prescribe medication, several reports had been written, one of which was *Improving Patients Access to Medicines: A Guide to Implementing Nurse and Pharmacist Independent Prescribing within the NHS in England*.¹¹ This report aimed to aid the implementation of the scheme, and outlined the routes to becoming certified and the expectations of those who work under this scheme.

The National Patient Safety Agency and the National Reporting and Learning System. When *Organization with a Memory* was published in 2000, the theme was to learn from the adverse events occurring in the NHS, to avoid patient harm.¹ This publication also promoted clinical governance, NSFs, and NICE as methods to improve standards of care, and identified several factors affecting clinical practice. The report discussed potential dangers of medication errors, and recommended the introduction of a confidential reporting system for adverse events and near misses. It emphasized the necessity of focusing on the 'root' cause of the error, rather than placing the blame. In 2001, following *Building a Safer NHS for Patients-implementing an Organization with a Memory*,² the Department of Health introduced several initiatives as part of the drive for patient safety, such as

the establishment of the National Patient Safety Agency (NPSA) and the National Reporting and Learning System (NRLS). The motivation was to emphasize the need to understand and learn from adverse events and near misses in the health care system to improve patient safety. In 2004, the NPSA published *Seven Steps to Patient Safety* as a policy to assist NHS staff in enhancing patient safety.¹² The 7 steps encourages culture change, supporting staff leadership skills development, better risk management, higher levels of incident reporting, improved communication and lesson sharing, and most importantly, preventing harm to patients. In 2005, a secondary report to *Building a Safer NHS*² dealt specifically with improving medication safety. This spoke primarily of the contributions of the NPSA initiatives in preventing harm, including the NRLS and its counterpart, the Patient Safety Observatory.¹³ In 2007, there was an initiative by the NPSA to further develop the potential for general practice computer systems to improve patient safety.¹⁴ The initiative identified flaws in electronic prescribing systems used in primary care, and suggested remedies to improve safety; such as increasing linkage between the patient and prescribing data, and enhancing hazard alerts. That same year, the NPSA collaborated with the Department of Health to initiate the *Safe Medication Work Program*, an information pack that disseminates safety messages to pharmacists within the NHS.¹⁵ This new approach by the NPSA resulted from the White Paper *Building a Safer NHS for Patients-Improving Medication Safety*.¹³ This joint initiative promotes the importance of managing medicines safely, improved use and safety of care.

Information technology (IT) in the NHS. Following up the 1997 pledge to develop the information technology infrastructure and modernize, the DH began a National Program for IT in the NHS, outlining the goals in *Delivering 21st Century IT-support for the NHS*. The ultimate aim of the program was to 'ensure caregivers have the right information at the right time'.¹⁶ Multiple objectives were set out in this publication, such as improving patient safety, promoting clinical governance schemes, upholding the drive for quality care, and providing support for practicing clinicians. A guide to the national program for IT¹⁷ outlined the national strategy to implement IT in the NHS. Included among its projects were the electronic patient record and the electronic transfer of prescriptions. The UK has since implemented primary care computerized prescribing and clinical decision support programs such as Prescribing Rationally with Decision Support in General Practice (PRODIGY) and Computer Assisted Prescribing Using Logic Engineering (CAPSULE) as initiatives to improve patient and prescribing safety.^{18,19}

PRODIGY (now replaced with Clinical Knowledge Summaries (CKS)), is a resource available in several formats: web, clinical support system, and printed materials, to all health professionals and contains information on various conditions. It is a reference guide, providing links to guidance from NICE, and recommending medication options. Clinical Knowledge Summaries has been adapted to suit the needs of nurse prescribers and allows information leaflets to be printed for patients.¹⁹ Walton²⁰ describes CAPSULE, and explains the 3 levels of support that a prescriber can utilize. Upon evaluation of this computer system, he found effective ways to improve prescribing quality with improved compliance support.²⁰

In 2006, an initiative to introduce hand held computers into the clinical setting was described.²¹ Hand-held technology is an emerging tool that can be used by health professionals to improve practice quality, and assist in promoting patient safety by providing those professionals with a way to access up-to-date information readily. The British National Formulary has been upgraded to include a format compatible to hand held devices, to enable health professionals to access the formulary electronically, and NICE guidance is easily accessible through hand held computers as well.²¹

Medicines management. As a result of the policy directions in *The New NHS*⁶ and *A First Class Service*,⁹ an attempt was made to restructure medicines management in the NHS. An initiative in 2001 was to employ pharmacists as prescribing advisors within primary care organizations in the NHS, as part of the drive to promote rational prescribing, and for quality and patient safety purposes.²² The role of these pharmacist prescribing advisors was to provide advice and support to general practitioners and their practices and to improve standards of quality and effectiveness of care.²³ In 2003, the UK Medicines Control Agency was transformed into Medicines and Health Care Products Regulatory Agency (MHRA), and published a booklet entitled *Safety, Quality, Efficacy: Regulating Medicines in the UK*.²⁴ They detailed the duties and responsibilities of the MHRA, and its plans for the future of medicines safety.

In 2006, the DH issued *Medicines Matters: A Guide to the Current Mechanisms Available for the Prescribing, Supply and Administration of Medicines*.²⁵ This was a guide to service redesign plans, providing an outline of mechanisms to be used when prescribing, supplying or administering medicines. It was also to support the non-medical prescribing initiative, and encourage continuous professional development. It prioritizes patient safety, promotes the use of clinical decision support and explains the legislative movements behind

prescribing. It also refers to other valuable sources of guidance on prescribing medication.²⁵

The National Electronic Library for Health. The National Electronic Library for Health in Primary Care (NELHPC) is an initiative launched in 1999, and the National Electronic Library for Health (NELH) followed the next year. The NELH is part of the NHS Information Strategy,⁶ stemming from health professionals need for high quality information, and is a method of encouraging the shift towards evidence based practice.²⁶ The NELH is a main source of guidance for health professionals in the NHS.²⁶ An electronic resource, the main entry point is the website, launched in 2000 as a fountain of high quality information, assisting practitioners in moving towards evidence based practice. The goal of the library was to become a complete repository of evidence based information, allowing health professionals access through NHS net⁶ to full guidelines and protocols for treatment and care.

The National Prescribing Centre. The National Prescribing Centre (NPC) was established in 1996,²⁷ an initiative to improve quality and safety of prescribing medication. Among its aims is to produce high quality information on prescribing and medicines management to the NHS, through dissemination of the evidence base to the NHS and the DH in its bulletins, continuously updating their database on medication indications and conducting training workshops for prescribing health professionals.²⁸ A NPC initiative in 1997 occurred in collaboration with the UK Drug Information Pharmacists Group, and consisted of providing key figures within the NHS with reports on new drugs 6-12 months prior to launch, enabling the health service to plan and coordinate.²⁷ This was a result of increased concern for improving safety, quality, and cost-effectiveness of medication, and encouraging use of the evidence base to inform decisions. An evaluation afterwards found favorable responses.²⁷ In 2002, the NPC published *Room for Review: Guide to Medication Review* as a resource for health professionals conducting periodic reviews of medication.²⁹ This provides the steps in conducting reviews, and promotes the involvement of the patient, and increased collaboration between pharmacists and nurses to ensure the success of the process. Collaboration between clinical pharmacology and clinical pharmacy was another form of initiative undertaken by a research university. An advisory committee was set up to use audit mechanisms, teaching in small groups, peer review techniques and setting targets to alter prescribing habits.³⁰ This resulted in higher rates of prescribing generically, improved cost effectiveness, and better standards of prescribing. An initiative was undertaken in 2003 to create a model for use in implementing clinical guidelines in practice

to improve prescribing.³¹ The aim was to structure the process into 6 steps, and to influence general practitioners' prescribing. This initiative was useful in guiding prescribing practice, but necessitated the availability of computerized patient information and guidelines for its success.³¹

The British Medical Association. The British Medical Association (BMA) publishes regular guidance for the medical profession in the list of preferred drugs, or British National Formulary (BNF).³² This handbook contains detailed information on the process of prescribing medication, and stresses items necessarily documented on each prescription. The formulary is accompanied by NICE guidance on each type of drug, to promote evidence based prescribing. The formulary details prescribing to specific patient groups and controlled drugs, and gives guidance on using computerized prescribing systems.³² The BMA has published *Evidence Based Prescribing*,⁸ which resulted from the shift in providing experience based care to care based on high quality evidence,⁹ and placed prescribing as a priority for high quality safe care. The document discussed barriers to implementing the evidence base in prescribing decisions and promoted solutions, among which are utilizing NPC recommendations, the BNF, NICE guidelines, the BMJ and the Cochrane Review.⁸ The document emphasized the value of information technology as a resource to improve evidence based practice.

Other sources of information. In 1998, a book on *Prescribing in Primary Care* was published as general guidance.³³ This book highlights feedback doctors receive through the PACT data and discusses the distinction between guidelines and protocols, all of which are freely available, to improve prescribing. The book mentions the use of a preferred list of drugs as a way to regulate and enhance prescribing standards. There is general guidance on the advent of information technology in the field of prescribing, encouraging the use of the evidence base to support the decisions.³³ The *Evidence Based Primary Care Handbook*, published in 1999, gives an overview of the evidence based health care movement, and promotes the use of the clinical guideline as a means to safeguard patients and improve decision making in prescribing situations. The book encourages the principles of rational prescribing, and promotes the utilization of the pharmacist's skills to achieve goals of rational prescribing.³⁴

Results for KSA. Four policy documents in KSA fit the inclusion criteria, 2 of these contained initiatives by the Ministry of Health (MOH) to provide structure to services, and 2 contained guidance. A separate single guidance document included may also be considered an

initiative to provide health professionals with a reference when prescribing.

Ministry of Health. In the year 2001, the Ministry of Health (MOH) published *Pharmaceutical Care in Primary Health Care Centres* as part of the *Process Directory*.³⁵ This detailed prior policy issued by the MOH through the General Directorate of Primary Health Care, outlined expectations and duties of the physician and pharmacist on medication management in primary health care centres, and encouraged the concepts of rational drug use, teamwork and best practice. The *Directory of Process* is also used by the General Directorate of Primary Health Care Centres and its health professionals to guide practice.

The MOH published through the General Directorate for Primary Health Care several editions of *Manual for Primary Care*; the latest was in 2003. The aim was that there be a copy in every individual health care centre; being an information source for the health professional, and providing an overview of the primary care mission, and the country's strategy of implementation.³⁶ This publication detailed plans for several initiatives; an information technology system for clinical decision support, electronic prescribing, greater collaboration between health sectors and an improved family health record.³⁶ These initiatives emphasize the importance of updated information and its effects on quality and safety of patient care. This manual mentioned the duties of primary care health professionals towards medicines management and responsibility for patients. The manual was meant to guide primary health care teams and brings broad regulations for prescribing and prescription writing. It includes a chapter on the essential drugs list, encourages the concept of rational prescribing, and discourages polypharmacy.³⁶ There have been periodic efforts at establishing an essential drug list for use in primary care prescribing, the most recent of which was the first comprehensive *Saudi Primary Health Care Formulary*,³⁷ published in 2005. It is proposed to be available to all primary health care centers, and aims to minimize prescribing errors and enhance cost-effectiveness, part of a continuous effort to improve quality of care.³⁷ This formulary includes a specific section on prescribing errors and cautions for the prescriber, recommending attention to detail and assumption of responsibility for the patient's safety.³⁷

Executive Board of the Health Minister's Council for GCC States. The Executive Board of the Health Minister's Council for GCC States published a document in 2004, moving towards improved delivery of health care services and specifically, improving the pharmaceutical care. This document presented aspects of *Pharmaceutical Care* in each member state of the Gulf Cooperation Council (GCC), among the KSA.

The document emphasizes collaboration among all sectors of the health service, and across GCC borders; the ultimate goal being increased quality of care.³⁸ The document defined pharmaceutical care and the duties of preventing harm from medication errors, and the need to pinpoint the causes and develop solutions. Recently, the Executive Board of the Health Minister's Council for GCC States published a book of *Pharmaceutical Care Standards for the GCC States*.³⁹ This book details the work that has been underway in each of the countries on pharmaceutical care, including a review of the work in KSA to date.

Strengths and limitations of methods. One limitation was the difficulty in locating grey literature; the reviewer (Zedan H) depended heavily on bibliographies and other sources to identify unpublished work or work in progress. The literature in KSA was not plentiful; that does not preclude the existence of work on the review topic, but it was of limited availability on the internet. Only a single reviewer (Zedan H) carried out the systematic review, although one of the authors (Avery A) was familiar with the field and with all the UK literature.

Within the past decade in the UK, health sector participation in the patient safety movement has been evident. Prominent figures such as the Chief Medical Officer, Liam Donaldson championed the patient safety cause; publishing documents such as *Organization with a Memory*¹ making it a priority of the health service. This movement coincided with the government's overall quality agenda, so there was a willingness to provide backing, politically and financially. The United Kingdom became one of the leading countries in patient safety, even proposing the establishment of a world alliance for patient safety.⁴⁰ The policy development regarding patient safety in the UK appears to be the result of a combination of leadership factors and a willingness to change. In KSA, there have been recent efforts to improve quality of care in the health service; the MOH setting standards for care, monitoring, and an increased move towards implementing the evidence base. The Health Minister's Council for GCC States is active in the field of health care quality, prioritizing safety in its work. As a council member, KSA participates in its activities, and accepts its workings as advisory to nationally developed policies. There are key figures attempting to influence the direction of the health services policy, but management problems and issues of organizational culture may be an impediment to their success. In the UK, the NHS modernization efforts clearly prioritized patient safety issues - from *Review of Prescribing, Supply and Administration of Medicines*¹⁰ beginning the nurse prescribing scheme to the White Paper *Organization with a Memory*,¹ initiating the NPSA, the NRLS and

the move to learn from adverse events, to supporting the NHS with Information Technology,¹⁶ patient safety is a strong motivating factor in health service change in the UK. In KSA, the MOH has been moving towards establishing a quality assurance program since 1993, currently revamping that program.³⁶ The distribution of the Directory of Process and the Manual of Primary Care are initiative examples that attempt to increase structure, quality and the safety of health service delivery.^{35,36} There are laudable efforts of the Health Minister's Council for GCC States in continuing to bring the safety issue to the immediate attention of the MOH,³⁸ and in their emphasis on enhancing the role of the pharmacist in primary care. The recent decision by the Council of Ministers to establish a Saudi Food and Drug Agency will increase public and professional awareness of safety issues in health care, with regard to the management and quality of medicines.⁴¹ In the UK, guidance is based on evidence, and the reasoning is that the application of high quality evidence to health care serves to safeguard patients and improve standards of care. The National Institute for Clinical Excellence guidance and the NELH are reliable sources of high quality guidance to use in making decisions and computerized systems of electronic patient records, electronic prescribing, clinical decision making and electronic transfer of records are also efficient means to enhance the safety of prescribing medication to patients. In KSA, MOH guidance provides health professionals with practice expectations. The Directory of Process, Manual of Primary Care, and the Primary Health Care Formulary are sources of information for practicing professionals, and place responsibility for the patient among its priorities, but place no emphasis on the importance of safety. In the UK, the publishing of policies, initiatives and guidance caused an increase in general awareness of patient safety and prescribing. The support of practice with NHS net has been implemented,⁶ and the numbers of health professionals utilizing the NRLS,¹² computerized prescribing¹⁸ the BNF and the NELH²⁶ is increasing. In KSA, policies and initiatives disseminated to local levels are used as guidance, such as the Directory of Process,³⁵ Manual of Primary Care,³⁶ and the Primary Health Care Formulary.³⁷ Copies are widely circulated to primary health care centers as reference for health professionals, but there has been evidence that they are rarely used.⁴

Recommendations. There is a great deal of activity in the UK with regards to patient safety and the safety of prescribing practice. A number of government-funded studies are currently underway to assess what impact this has had on patient care. The NRLS is a valuable mechanism to improve patient safety; however there are difficulties in increasing uptake of reporting in primary

care.¹² Stronger methods or incentives must be developed to increase adverse event reporting rates. Improved training for health professionals and increasing the incorporation of the concept of safety in prescribing, into medical school curricula,²⁵ and improving utilization of information technology, training health professionals on optimal use, and enhancing features that affect the safety of the prescribing process,¹⁴ are all recommendations that might be pursued. In KSA, studies have discussed factors affecting prescribing behavior. Previous reports found health professionals as having an overall low awareness and low levels of use of medical journals, publications, and databases⁴² and less than 20% had access to the internet. Another study⁴³ found only 39.6% of physicians had knowledge of the concept of evidence based medicine. Other studies point out that in the absence of other reliable sources, health professionals refer to medication package inserts for prescribing information,⁴³ which may not be the best source of advice on the relative benefits and risks of drugs. There is much interest in studying prescribing patterns and behavior in primary care in KSA, and studies conducted generally suggest improving access to guidelines,⁴⁴ training in prescribing and elimination of handwritten prescriptions⁴⁵ can positively facilitate the patient safety cause. There is a need to move forward, incorporating information technology into primary care facilities, encouraging the regular collection of patient data, enhancing uptake of evidence based guidelines, improving communication between health professionals and sectors, to improve patient safety when accessing health services.

Finally, incorporating aspects of patient safety and safe prescribing into medical school curricula, instilling the concepts and practice into the future health professional, will ensure that patient safety becomes the priority of care. Increasing the patient safety profile, and increasing awareness of health professionals on concepts of evidence based medicine, practice and guidance must be considered by policy makers; they are a means to achieve high quality care. Much of the activity on patient safety and prescribing in the UK may be due to governmental direction, and the championing of the cause by high ranking health professionals. However, more effort is needed to measure the impact of this activity on actual patients' safety. In KSA, policy has been aimed at improving quality of care, with new quality assurance programs being developed. None of the Saudi policies found were specific to prescribing safety (although the author [Avery A] was involved in the First GCC Medication Errors Symposium in 2005). Now is the time to focus more clearly on medication safety, establishing new standards and regulations.

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