Report on the Regional meeting on the Patient Safety Friendly Hospital Initiative: from measurement to improvement

Cairo, Egypt
16–19 November 2009
CONTENTS

1. INTRODUCTION ............................................................................................................. 1

2. BACKGROUND ............................................................................................................... 2

3. OVERVIEW OF THE PROGRESS ON PATIENT SAFETY IN THE REGION ..........4
   3.1 WHO patient safety programme .............................................................................. 4
   3.2 Progress in patient safety: experience from member countries of the GCC ..........4
   3.3 Development of patient safety standards and the assessment manual ............5

4. COUNTRY PRESENTATIONS .....................................................................................6
   4.1 Egypt ....................................................................................................................... 6
   4.2 Jordan ..................................................................................................................... 6
   4.3 Morocco .................................................................................................................. 6
   4.4 Sudan ...................................................................................................................... 7
   4.5 Pakistan .................................................................................................................. 7
   4.6 Tunisia ................................................................................................................... 8
   4.7 Yemen ..................................................................................................................... 8

5. TOOLS FOR PSFHI - ASSESSMENT MANUAL .................................................... 8

6. IMPROVEMENTS IN PATIENT SAFETY: PATIENT SAFETY CHALLENGES ....9
   6.1 Organizational commitment to patient safety ...................................................... 9
   6.2 First global patient safety challenge: clean care is safe care ............................ 10
   6.3 Second global patient safety challenge: safe surgery saves lives ................... 11
   6.4 Antimicrobial resistance and antimicrobial stewardships programme ..........11

7. INSIGHT INTO IMPROVEMENTS IN PATIENT SAFETY ........................................ 12
   7.1 Patient safety solutions: the work of the WHO Collaborating Centre for Patient
       Safety Solutions ..................................................................................................... 12
   7.2 Patient safety solutions: the WHO perspective .................................................. 12
   7.3 Patient safety research ........................................................................................ 13
   7.4 Empowering patients for better patient safety .................................................... 13
   7.5 Expanding PSFHI to other countries in the Region ............................................. 14

8. TOOLS FOR PSFHI: THE IMPROVEMENT MANUAL ..................................... 15
   8.1 Patient Safety Friendly Hospital improvement tool kit ........................................ 15
   8.2 Group work for outline of Patient Safety Friendly Hospital Improvement Tool Kit 15

9. THE WAY FORWARD ............................................................................................... 16

10. RECOMMENDATIONS ............................................................................................. 16
Annexes .......................................................................................................................... 18
1. AGENDA ..................................................................................................................... 18
2. PROGRAMME ............................................................................................................. 19
3. LIST OF PARTICIPANTS ............................................................................................. 22
1. **INTRODUCTION**

The first regional meeting on the “Patient Safety Friendly Hospital Initiative: from measurement to improvement” was organized by the World Health Organization (WHO) Regional Office for the Eastern Mediterranean, and was held in Cairo Egypt from 16 to 19 November 2009. The meeting was attended by 65 policy-makers and clinicians from 19 Member States of the Region.

The objectives of the meeting were to:

- share the results of the pilot studies and the lessons learnt on the Patient Safety Friendly Hospital Initiative (PSFHI) in seven countries of the Region;
- finalize the WHO PSFHI standards and assessment manual based on feedback from the pilot studies;
- agree on tools, instruments, interventions and an action plan for improving patient safety in pilot hospitals;
- expand the initiative to engage other countries of the Region.

Dr Abdulla Assa’edi, WHO Assistant Regional Director for the Eastern Mediterranean, delivered the opening message of Dr Hussein A. Gezairy, WHO Regional Director for the Eastern Mediterranean. Dr Gezairy said that the initiative aimed at setting standards which ensured that patients, their families and health care workers were safe in health care facilities. The problem of adverse events was not new and patient safety was a well-recognized concept. Studies conducted as early as the 1950s had discussed the problem. However, the subject was largely neglected until a body of evidence emerged in the 1990s, which brought the subject to the top of the policy agenda and provoked public debate. The situation in developing countries merited special attention due to the lack of resources, the scarcity of information and lack of organized systems. Orchestrated within a network of poor infrastructure and weak communications, the latter factors highlighted a problem of potentially enormous magnitude and dire consequences. Indeed, results from a recent study performed in six countries of the Region to assess the prevalence of adverse events in developing countries demonstrated that up to 18% of hospital admissions in countries of the Region were associated with patient harm that was the result of health care delivery. More importantly, these adverse events were associated with a high rate of serious harm in the form of death and permanent disability. This situation was unacceptable.

Current conceptual thinking on the safety of patients placed the prime responsibility for adverse events on deficiencies in system design, organization and operation, rather than on individual providers or individual products. Safety was a fundamental principle of patient care and a critical component of quality management. Its improvement demanded a complex system-wide effort, involving a wide range of actions in performance improvement, environmental safety and risk management, infection control, safe use of medicines, equipment safety and safe clinical practice. It embraced nearly all health care disciplines and actors, and thus required a comprehensive multifaceted approach to identifying and managing actual and potential risks to patient safety and finding broad long-term solutions for the system as a whole. Thinking in terms of systems offered the greatest promise of definitive risk-reduction solutions,
which placed the appropriate emphasis on every component of patient safety. The Patient Safety Friendly Hospital Initiative addressed these issues in a comprehensive manner and set standards that embraced many aspects of health care delivery. The initiative brought together concerted efforts, involving all elements and sectors of the health care delivery process towards the ultimate goal of improving safety in health care facilities.

Dr Gezairy said that the work of the World Alliance for Patient Safety had focused on addressing such system issues and tackling patient safety from a systems perspective, while designing and running programmes that addressed outstanding challenges. To address the issue of patient safety, the Regional Office had joined the World Alliance for Patient Safety in its worldwide endeavour to bring together the heads of agencies, health policy-makers, WHO and patient groups to advance the fundamental goal of reducing the potential unwarranted harm inflicted on patients. In its fifty-second meeting, the Regional Committee for the Eastern Mediterranean had formulated a resolution for enhancing patient safety. The Committee urged Member States to: develop national standards for patient safety, making use of WHO guidelines; formulate national patient safety programmes, in collaboration with the Regional Office and the World Alliance for Patient Safety; and establish mechanisms to promote partnership between regional patient safety institutions and national health care delivery systems. The Resolution represented the commitment of the highest WHO authority together with the Member States.

The first regional goal was to provide evidence on the magnitude of the problem in the Region. This was followed by the development of an instrument to assess the level of patient safety in hospitals. Over the last couple of years the Regional Office had been able to develop a patient safety assessment manual. This manual had been reviewed and piloted in seven countries. The ministries of health of seven countries—Egypt, Jordan, Morocco, Pakistan, Sudan, Tunisia and Yemen, had each nominated a pilot hospital to initiate testing and implementation of the tools of the initiative.

The chair was shared on a rotating basis. The agenda, programme and list of participants are included as Annex 1, 2 and 3, respectively.

2. **BACKGROUND**

Health care delivery inherently contains the potential for a breach of patient safety. Studies in developed countries have demonstrated that an estimated 10% of all inpatient admissions result in some form of patient harm. A recent study performed in selected developing countries in the Eastern Mediterranean Region (Egypt, Jordan, Morocco, Pakistan, Sudan, Tunisia and Yemen), corroborates these findings and demonstrates that up to 18% of inpatient admissions in developing countries are associated with adverse events (unpublished data). Moreover, the study calls attention to the glaringly high rate of death and permanent disability related to adverse events in some countries of the Region. Indeed, inadvertent patient harm inflicted by health care facilities is likely to be more imminent in developing countries where resources are lacking, information and technology are outdated and the health care system is not well-organized.
The WHO Eastern Mediterranean Region comprises 22 countries and health systems covering a population of over 500 million. There are over 4500 public sector hospitals and over 4100 private sector hospitals, with a total number of approximately 800 000 hospital beds in the public sector. It is estimated that the number of annual admissions exceeds 30 million. This massive number of patients utilizing health care strongly warrants special attention to patient safety in the Region.

The results of the study performed to determine the prevalence and nature of adverse events in countries of the Region reinforce the need for interventions that allow for endorsement of high-quality health care delivery within the context of a constructive and conducive environment. One such intervention is the Patient Safety Friendly Hospital Initiative (PSFHI), a programme that aims to instigate and encourage safe health care practices in hospitals in the Region. In principle, this initiative involves the implementation of a set of patient safety standards in hospitals. Patient safety standards (measures) and implementation guidelines have been developed by the WHO Regional Office. A regional and international expert panel was recruited to examine these standards in accordance with the guidelines provided by WHO. The standards cover a wide array of areas and are divided into the following sections.

1. Leadership and management measures
2. Patient and public involvement measures
3. Safe evidence-based clinical practices measures
4. Safe environment measures
5. Lifelong learning measures.

In coordination with ministries of health, one pilot site was selected in each of seven participating countries participating in the first phase of the study (Egypt, Jordan, Morocco, Pakistan, Sudan, Tunisia and Yemen). A focal point at each hospital was assigned. Following an expert consultation held at the Regional Office in March 2009, the standards and implementation manual were revised and finalized. Experts were trained to perform baseline assessment surveys in the pilot hospitals.

It was essential that the results of the pilot studies be shared with policy-makers and senior managers and the standards manual finalized based on the feedback received from the pilot studies. This meeting paved the way for implementation in more countries of the Region. This initiative has been a joint collaborative effort between the Regional Office, the International Islamic Relief Organization and the World Alliance for Patient Safety. The meeting brought together all involved parties towards the ultimate goal of moving from measurement of patient safety incidents to improvement of patient safety in the Region and globally.

The Regional Office initiative on patient safety, launched in 2002, is achieving progress at different levels and is well received by ministers of health in member countries of the Gulf Cooperation Council (GCC), revealed by the issuance of a number of resolutions committed to patient safety. One of the important actions following these resolutions is the issuing of the
Kuwait Declaration on Patient Safety and placing patient safety on the highest political agenda and the implementation of the strategy for patient safety, and adverse events reporting framework, in addition to all other initiatives launched by the World Patient Safety Alliance. These included clean care is safer care, safe surgery saves lives, medication safety, pharmacovigilance, hospitals safe in emergencies and antimicrobial resistance.

The common themes of work between WHO and the World Alliance for Patient Safety include generating awareness and commitment to health priorities, engaging government and societies, and addressing system failures by supporting international and regional players to develop tools and accelerate understanding, encouraging reporting in a system design for effective solutions, decreasing the culture of blame and empowering championship.

3. OVERVIEW OF THE PROGRESS OF PATIENT SAFETY IN THE REGION

The PSFHI focuses on raising awareness of patient safety, assessing scope, understanding the causes of errors, developing and testing methods for intervention, and organizing and running patient safety programmes.

3.1 WHO patient safety programme

The Regional Office has made great progress in the area of patient safety. Patient safety activities implemented to strengthen care delivery systems include:

- High 5s programme and standard operating protocols
- African partnership for patient safety
- patient safety curriculum guide
- patient safety technology
- WHO guidelines on hand-hygiene and tools
- safe surgery saves lives guidelines;
- surgical safety checklist and other tools
- patient safety solutions aide memoirs.

3.2 Progress in patient safety: experience from member countries of the GCC

The GCC adopted the work in patient safety for many reasons and had set accordingly a number of strategic directions by the ministers of health of the GCC. Resolutions and mandates included: establishing a working team for infection control and a task force for patient safety implementation, positioning patient safety and patients’ rights at the highest level of national priorities, conducting research in patient safety and setting national plans for continuous medical education.

A major development was the adoption of the framework of the Regional Centre for Patient Safety in Kuwait and disseminating risk management activities in member countries of the GCC, reducing the rates of medical errors and malpractice and nosocomial infections rates, and reporting regularly in a national notification system. The Director-General and
Executive Board issued the glossary of patient safety, which was disseminated widely in the Region, in addition to many other publications, including guidelines and educational information.

Member countries of the GCC were active in the Regional Office’s efforts to develop a regional strategy for patient safety, and urged member countries of the GCC to establish a national group to implement the regional strategy at country level.

A number of crucial decisions were reflected in the Jeddah Declaration, which was the first regional declaration on patient safety. The Declaration emphasizes the importance of the provision of safe health care for health and medical service beneficiaries and investment in the prevention of adverse events. In the Declaration a roadmap and timeframe were set to achieve its objective – to decrease medical error by 50% over 10 years from 2010 to 2019.

3.3 Development of patient safety standards and the assessment manual

A draft of the PSFHI assessment manual was developed after reviewing a number of resources, including WHO clinical guidelines, literature on patient safety, accreditation standards, including the League of Arab States quality in health care accreditation standards and patient safety initiatives and activities in different countries. The process included internal and external peer review, pre-piloting in Egypt and establishment of an expert panel to test and finalize a draft at regional level.

The main domains of the assessment include:

- leadership and management measures
- patient and public involvement measures
- safe evidence-based clinical practices measures
- safe environment measures
- lifelong learning measures.

Discussions

Ways need to be identified to shift from a culture of blame to one of learning and to recognize and empower champions of change at country level. It is difficult to maintain patient safety efforts when there is a fast turnover of staff and changes in leadership. The role of WHO is to develop capacities at the country level. The GCC Executive Board work at policy level and develop strategies and policies to which countries commit resources and implement programmes. Countries need national action plans and the commitment of mid-level managers to implement initiatives. Advocacy is needed at different levels and at different stages of implementation and institutionalization of patient safety programmes. A body should be established to oversee patient safety data and to follow-up on implementation of initiatives.
4. COUNTRY PRESENTATIONS

4.1 Egypt

Om El Masryeen Hospital is a ministry of health teaching hospital. Daily there are about 1200 outpatients and 700 emergency room visits. The average length of stay is 7.1 days. The hospital has 1200 staff comprising 559 doctors, 108 administrative staff and technicians and 193 nurses. The hospital demonstrated partial compliance with the criteria reflective of patient safety measures. The majority of critical criteria (78%) and almost half of the core criteria (46%) were met, and 2% of developmental criteria (0.5 out of 30).

Some of the recommendations arising out of the assessment included to:

- make patient safety a strategic priority.
- develop terms of reference.
- conduct regular patient safety executive walk rounds.
- include morbidity rates in monthly mortality meetings.
- implement patient identification policies and procedures.
- establish systems to ensure safe communication of test results to patients and care providers after discharge.
- conform to unified guidelines and standards, including WHO guidelines, on safe blood and blood products.

4.2 Jordan

Al Basheer Hospital is a general public teaching hospital with 921 beds in urban Jordan. The average number of daily outpatient/ambulatory visits is 1200. The average number of daily emergency room visits is about 700. A team comprising two consultants assigned by Regional Office conducted an assessment for three days. The assessment was based on three major review tools: reviewing documents, conducting interviews and site visits. The hospital demonstrated partial compliance with the criteria reflective of patient safety measures; 65% of critical criteria, 37% of the core criteria and 8% of the developmental criteria were met at the hospital.

4.3 Morocco

Moulay Youssef Hospital is a non-teaching reference hospital with a total capacity of 162 beds. The average length of stay is three days and the overall occupancy rate is 47%. The number of outpatient visits is 200 per day, emergency room visits 200 per day. There are 55 physicians, 167 nurses, 1 pharmacist, 1 technician and 64 managerial staff. The assessment team comprised three experts assigned by Regional Office. The assessment was based on three major review tools: reviewing documents, conducting interviews and site visits. The hospital complied with 10.5 out of 20 critical criteria (53%), 25.5 out of 90 core criteria (28%) and 2 out of 30 developmental criteria (3%).
4.4 Sudan

North Khartoum Teaching Hospital is a Ministry of Health Hospital, located in Bahri, northern Khartoum. The hospital was established in 1950 as a 100-bed hospital with progressive improvement in facilities and services. In 1980, a central laboratory and radiology services were added, and in 1985, the new 52-bed emergency and accident unit was commissioned. Some departments are affiliated with the Medical Faculty in Khartoum University. 386 beds are free of charge and 97 beds are charged. The hospital has 483 beds (431 inpatient beds and 52 beds in the emergency department) and 871 staff. A team comprising two consultants assigned by the Regional Office conducted the assessment in coordination with the hospital’s deputy director and patient safety team and Ministry of Health Patient Safety Focal Point. North Khartoum Teaching hospital demonstrated limited compliance with the criteria reflective of patient safety measures. Overall there was 40% compliance with critical criteria, 27% compliance with core criteria and 3% compliance with developmental criteria.

4.5 Pakistan

The Pakistan Institute of Medical Sciences (PIMS), Islamabad, is a 1041-bed tertiary care hospital. The average number of daily inpatient visits is 120. The number of outpatient annual visits and emergency room annual visits during the last year were 2570. Service delivery components include: Islamabad Hospital, a children’s hospital, mother and child health centre, burn care centre and a PIMS satellite hospital. Each clinical component of this hospital has an outpatient department, inpatient department, diagnostic area, accident and emergency centre and service block. The academic components include Quaid-e-Azam Postgraduate Medical College, College of Nursing, School of Nursing, College of Medical Technology and a training centre.

The assessment team comprised four members, including experts assigned by WHO Regional Office and members of the health quality unit at PIMS. The assessment was based on three major review tools: reviewing documents, conducting interviews, and site visits. PIMS complied with 13 out of 20 critical criteria (65%), 34.5 out of 90 core criteria (38%) and 2.5 out of 30 developmental criteria (8.3%). In this baseline assessment, the hospital demonstrated limited compliance with patient safety measures.

4.6 Tunisia

Fattouma Bourguiba University Hospital was established in 1910. From 1968 to 1977, the hospital was a general hospital, and in 1977, became a university hospital. A team comprising three consultants conducted the assessment in coordination with the hospital director and the patient safety team. The assessment was based on three major review tools: reviewing documents, conducting interviews and site visits. The hospital demonstrated only partial compliance with the patient safety measures; 53% of critical criteria, 42% of core criteria, and 20% of developmental criteria were met at the hospital.
Areas of strengths included: patients represented on hospital board, adequate supplies and equipment, staff pattern appropriate for patient needs, infection control SOPs and emergency guidelines available, WHO safe surgery checklist implemented in one operating theatre, national patient rights and responsibilities recently developed and the use of a standardized code for diseases (ICD-10). There is an internal and external emergency plan and research related to patient safety has been conducted.

Opportunities for improvement include the need to: foster a no-blame patient safety culture, develop a patient safety programme, establish an accident and emergency reporting system, and risk management system, develop a documented maintenance programme for equipment, develop written clinical guidelines, and a more appropriate patient identification system, as well as a unique centralized medical record department. More attention needs to be given to a continuing education programme for all staff that includes a patient safety component and the role of medical committees should be emphasized in staff appraisal and monitoring staff competency.

4.7 Yemen

Al Wehda Hospital is a public teaching Ministry of Health hospital with 315 beds. It specializes in obstetrics and gynaecology and paediatrics. The hospital was built in 1978 to serve as a model hospital for the south area of Yemen. The staff includes 183 physicians, 284 nurses, 97 technicians and 56 administrators. The assessment was based on three major review tools: reviewing documents, conducting interviews and site visits. In this baseline assessment, the hospital demonstrated only partial compliance with the patient safety measures and criteria required for the PSFHI, 25% of critical criteria, 18.5% of core criteria and 1.7% of the developmental criteria were met at the hospital.

Common findings and conclusions included the following.

- Staff enthusiasm and motivation for patient safety among management and staff was high in the surveyed facilities.
- Documentation is weak.
- Patients’ rights, ethical considerations and privacy and consent forms needs immediate consideration.
- Safety measures for staff and patients needs to be given immediate attention.
- The experience raised the awareness of managers.
- Mortality and morbidity readings are not collected or studied.
- Risk management and incident reporting needs to be systematized.
- Waste management is a crucial issue in many of the surveyed hospitals.

5. TOOLS FOR PSFHI - ASSESSMENT MANUAL

The objectives of the group work were to comment: on the overall structure of the PSFHI assessment manual; on the technical merit of the patient safety standards; on the
applicability of the patient safety standards; and to collect suggestions for improvement of the PSFHI assessment manual.

Participants were divided into five groups. Groups 1–4 were assigned to review the various sections of the assessment manual; group five reviewed the scoring system. Participants reviewed the assessment manual according to SMART methodology and a list of questions.

Participants came to the consensus that the manual was an encouraging tool for safety and quality improvement. It is simple to use and acceptable to end-users. It can be also used as a self-assessment tool and includes assessment of patient and public involvement in patient safety activities. Participants also agreed that there should be three rating levels according to criteria classification.

- Level one when meeting all critical criteria, in addition to any number of both core and developmental criteria.
- Level two when meeting all criteria for both critical and core, in addition to any number of developmental criteria.
- Level three when meeting all three critical, core and developmental criteria.

Participants agreed on the following scoring system.

- To score “zero” when criteria is not met.
- To score “one” when criteria is partially met.
- To score “two” when criteria is fully met.
- To score “not applicable” if criteria or service is not available but not applied to critical criteria.

Some participants suggested including an annex with a glossary of terms. Consensus was reached that the manual was practical, reliable and measurable. There was a suggestion to use words rather than numerals in the rating. Participants agreed that the scoring of criteria should not be limited to a review of documents only but also to observation and/or interviews.

6. IMPROVEMENTS IN PATIENT SAFETY AND PATIENT SAFETY CHALLENGES

6.1 Organizational commitment to patient safety

All baseline assessments show a lack of commitment at leadership and governance level. There are no well-organized programmes for patient safety. No data are used to monitor and evaluate patient safety programme. Of the 36 criteria no one reached 50% so there is a need to identify what can be done. Hospitals need to have well-established patient safety programmes, availability of policies guidelines and SOPs, availability of essential functioning
equipment and supplies, a training programme for staff, a budget for patient safety and data to improve patient safety performance.

The organizational set up for the patient safety programme might include:

- structure and posts: patient safety committee, senior staff responsible for patient safety, full-time patient safety staff and/or unit, and nurses and paramedical staff involved;
- manuals and procedures which include terms of reference, post descriptions and standard operating procedures.
- information sources to improve patient safety – functioning committees, mortality and morbidity review, clinical audit, adverse event reporting system, and use of information for informed decisions.
- channels for enhancing patients’ voices – patient education in patient safety, and complaints and means to redress complaints.

The hardest change for those who are trying to promote clinical risk management and patient safety is a cultural change. Human error needs to be looked at in a different way, from a two-system approach – non-blaming and non-punitive.

6.2 First global patient safety challenge: clean care is safe care

The first global patient safety challenge aimed to reduce health care-associated infection worldwide. The burden of health care-associated infections is a worldwide burden, but there is a lack of reliable data. More than 1 million worldwide at any time and no health care facility, no country, no health care system in the world is free of this problem. Different studies estimate the burden of health care-acquired infections studies on impact of hand-hygiene promotion. One study from 47 countries revealed that compliance rate with hand-hygiene is low. WHO developed guidelines on hand-hygiene to convert knowledge into action, and also developed a multi-model improvement strategy for implementing hand-hygiene in health facilities, in which there are five steps for implementation with a suggested timeline for implementation.

- Step 1: Facility preparedness
- Step 2: Baseline evaluation
- Step 3: Implementation
- Step 4: Follow-up evaluation
- Step 5: Action planning and review.

WHO also developed over 42 tools in the hand-hygiene implementation tool kit, which are available on the WHO web site. Lessons learned on how to ensure long-term sustainability include:

- establishing compliance goals
- monitoring monthly hand-hygiene compliance
- reporting open compliance results (web dissemination)
- identifying champions (nurses and doctors) at ward level
• conducting education at the bedside during observation
• addressing health care workers’ concerns (e.g. tolerability)
• catalysing competition (e.g. posters)
• focusing on personal accountability while maintaining a no-blame culture
• ensuring patient participation.

6.3 Second global patient safety challenge: safe surgery saves lives

The safe surgery saves lives initiative was established by the World Alliance for Patient Safety as part of WHO efforts to reduce the number of surgical deaths across the world. The aim of this initiative is to harness political commitment and clinical will to address important safety issues. The surgical safety checklist was piloted in eight countries around the world; morbidity rates were reduced after applying the checklist and complications reduced.

The roll-out phase was multilevel: ministry of health, professional societies, health care institutions and facility. The Ministry of Health established a committee responsible for setting up the necessary strategies for the implementation of the checklist at ministry of health hospitals.

6.4 Antimicrobial resistance and antimicrobial stewardships programme

Key prevention strategies for antimicrobial resistance include:

• preventing infection
• diagnosing and treating infection effectively targeting the pathogen
• accessing experts
• using antimicrobials wisely: practising antimicrobial control; using local data; treating infection, not contamination; treating infection, not colonization; knowing when to say “no” to vancomycin. Stopping antimicrobial treatment.
• preventing transmission: isolating the pathogen and breaking the chain of infection.

Guidelines for developing an institutional programme to enhance antimicrobial stewardship, which includes a comprehensive evidence-based antimicrobial stewardship programme to combat antimicrobial resistance, include elements chosen from among the following strategies, which are based on local antimicrobial use and resistance problems and available resources. Effective antimicrobial stewardship requires a multidisciplinary team approach. The core members of the programme include an ID physician, a clinical pharmacist with ID training, infection control professionals, hospital epidemiologist, clinical microbiologist, and information system specialist. Programme personnel should be included as active members on the hospital infection control, pharmacy and therapeutics committees.
7. INSIGHT INTO IMPROVEMENTS IN PATIENT SAFETY

7.1 Patient safety solutions: the work of the WHO Collaborating Centre for Patient Safety Solutions

The objective of the High 5 project is to achieve a reduction in the occurrence of patient safety problems. The project involves: implementation of SOPs, impact evaluation strategy, data collection, reporting and analysis, collaborative learning community and project report. Key accomplishments of the project include: identification of lead technical agencies, establishment of steering committee, development and refinement of SOPs, development of a comprehensive evaluation strategy and creation of learning community framework. Project challenges include: ensuring standardization across diverse countries, language barriers, competition with existing in-country project priorities, concerns about the control of project results and project launch.

7.2 Patient safety solutions: the WHO perspective

The aim of the patient safety solutions was to redesign care processes to prevent harm to patients. The role of the WHO patient safety programme is to promote existing solutions and coordinate international efforts to develop future solutions.

The nine patient safety solutions (aide memoirs) include:

- look-alike, sound-alike medication names
- patient identification
- communications during patient handover
- performance of correct procedure at correct body site
- control of concentrated electrolyte solutions
- assuring medication accuracy at transitions in care
- single use of injection devices
- avoiding catheter and tubing misconnections
- improved hand-hygiene.

An SOP is a set of instructions for implementing a defined process in a consistent and measurable manner by multiple users. So far, three of the five solutions have been developed.

- Performance of correct procedure at correct body site (US)
- Assuring medication accuracy at transitions in care (Canada)
- Managing concentrated injectable medicines (UK).

The other two which include: communication during patient care handovers (Australia) and improved hand-hygiene to prevent health care-associated infections are still under development.
Discussions

Patient safety is a relatively new programme in the African and Eastern Mediterranean Regions. Certain issues need to be studied to ensure feasibility before implementation on a large scale. The High 5 project is still under review. After evaluation of the findings, WHO will finalize the protocols to be disseminated to other countries and implemented with WHO technical support. High 5 solutions are meant to be used globally, not only in high-income countries. Hospitals in high-income countries have the same patient safety problems as those in low-income countries. Patient safety is a challenge to countries in the Region. Each country can choose what is appropriate for them from among the different approaches and initiatives. Evidence is emerging from developed countries. This is to be assessed to see if implementation is practical in the Region.

7.3 Patient safety research

Global priority areas include insufficient capacity in research, especially in areas of impact evaluation, economic evaluations, measuring harm, human factors/safety design and change management. It is important to strengthen research capacity and capacity-building at individual, institutional and policy levels. The small research grants project of the World Alliance for Patient Safety (US$ 500 000 a year) supports 20 to 30 small studies worldwide that target applied research to identify locally-effective solutions. An alternative research method combines qualitative data collection and observation with record review.

Discussions

When comparing the rate of adverse events from the Tunisia study with that of Australia, the influence of the accuracy and completeness of reporting should be considered. Also the types of diseases in each country should be considered. Excluding patients who stayed for only one day from the sample (thus excluding one-day-surgery patients) might be a source of bias. Exclusion criteria of "one day stay" was for comparability reasons, patients staying for one day cannot be compared with those staying for more days. Accessibility to health services is influenced by the organization of the health system. Recommendations include to: improve research capacity in the Region, especially in member countries of the GCC as they have the necessary resources. Research activities should be included in the forthcoming PSFHI plan.

7.4 Empowering patients for better patient safety

The current situation reflects poor awareness and lack of culture concerning the rights of patients by health care workers, as well as patients. There is a disregard for patients’ rights which has led to a loss of trust in the health care system. Challenges and obstacles include: the attitude of health care workers and the difficulty in changing attitudes; poor knowledge about patient rights due to deficient educational curricula in nursing and medical schools and lack of training courses. Interventions to improve patients’ rights can be implemented through many actions targeting patients, the community, health care workers and institutions.
Methods include:

- raising community awareness through the media
- involving health care professionals
- empowering patients to know their rights through the media, social workers, nongovernment organizations
- medical school curriculum incorporating “the patient’s voice”
- encouraging management to listen to patients
- increasing the number of staff
- issuing certificates and rewards for excellence
- creating a good working environment for staff in hospitals
- training and enhancing the role of social workers and social secretaries as liaison between patients and doctors
- establishing hotlines in hospitals for complaints
- establishing an effective bureau or office for patients
- opening discussion with staff in case of any harm
- establishing a simple reporting system available to patients at their request.

Achievements at the hospital level include: better relations between doctors, nurses and patients, awareness of patient involvement, inclusion of resident–patient relation in resident evaluation sheets, motivating excellent performance of staff and recognition of privacy of patient.

7.5 Expanding PSFHI to other countries in the Region

Participants shared keys to successful implementation of patient safety initiatives.

Approaching leadership

- Presenting the issue to decision-makers, supported by data, experience of other countries and research results influences acceptance of the initiative as in Jordan, Tunisia.
- Defining patient safety interventions in a non-threatening way as in Tunisia.
- Approaching decision-makers through less sensitive issues (e.g. clean care) as in Jordan.

Commitment

- High level of commitment at country level was a key factor for success in Jordan, and Tunisia.
- Availability of core people who are committed and knowledgeable was a key to success in Jordan and Tunisia.

Others

- Availability of programmes with well-defined priorities (Tunisia).
- Involvement of medical professions (e.g. physician association) (Tunisia).
• Following a down-to-top approach in the process (Tunisia).
• Establishment of a national team for patient safety committee.
• Gain patient trust (Tunisia).
• Availability of a national level patient safety group.
• Consider the role of the media to send messages to the community.

Challenges and constraints

The challenges and constraints include talking to leadership and decision-makers in the ministry of health about patient safety problems. Leadership and decision-makers do not always know the exact magnitude of the problem at hospital level.

8. TOOLS FOR PSFHI: THE IMPROVEMENT MANUAL

8.1 Patient Safety Friendly Hospital improvement tool kit

The proposed framework for the manual is based on the five domains of patient safety measurements, with details of the components to be included under each measure.

• Developing and implementing patient safety programme
• Improving patient safety in evidence-based clinical practices
• Becoming a lifelong learning hospital
• Improving safety of hospital’s environment
• Improving patient for patient safety.

8.2 Group work for outline of PSFHI improvement tool kit

The expected outcomes of the second working group session were to provide comments on the proposed framework of the PSFHI improvement tool kit, what is the major content based on the five domains, what are the essential tools, instruments guidelines, protocols, polices, etc. that need to be included in the manual and key recommendations. Participants were divided into five groups to discuss the framework and the contents of the manual. Following group presentations, consensus was reached on the following.

• Abbreviations
• Glossary
• Introduction: how to use the manual, purpose and overview
• Strategic planning for safety - vision, mission, goals and strategies
• Developing and implementing patient safety programme in a hospital setting
• Budget and financial resources
• Environmental readiness
• Creating a culture for safety
• Incident reporting system
• Leadership roles and responsibilities
• Training plan
• Environmental safety.

9. THE WAY FORWARD

The elements of the action plan include to:

• define the problem, or the standard
• determine solution to the problem
• define steps and procedures, activities or action
• define the responsible person
• identify how much time is needed to solve the problem
• develop a monitoring strategy.

Each team is composed of a group of people working together to achieve their objective, i.e. solve a problem or improve patient safety practices in a certain area, e.g. safe blood. The team will define the problem or the standard not met. Then they will perform a root cause analysis. The team has to understand all possible factors and if they find difficulty in describing the problem in a practical way, then the teams should think about the problem’s impact on the patients, evaluate if/when they solve this particular problem, will this result in safer health care practices? Action plans should be dynamic through continuous monitoring and follow-up on implementation, accessible for all staff to see with leadership continuously supporting implementation of solutions.

10. RECOMMENDATIONS

To Member States

1. Raise awareness of patient safety with a multilevel strategy aimed at policy-makers, hospital staff, patients and the public.

2. Adopt and/or adapt PSFHI standards; WHO hand-hygiene guidelines; WHO safe surgery checklist; and WHO patient safety solutions.

3. Build regional capacity for research on patient safety and conduct patient safety research, conduct data analysis and publish reports.

4. Develop reporting systems for patient safety.

5. Engage civil society to be the “voice of the patients” and recognize the essential role and value of patient involvement as a catalyst for change.

6. Integrate patient safety in health systems.

7. Incorporate patient safety into the curricula of medical, nursing and paramedical (allied health services) schools.
To WHO Regional Office

8. Include a glossary of terms in the PSFHI assessment manual.

9. Expand the PSFHI to other countries in the Region.

10. Develop tools to improve patient safety and provide technical support in the different areas of patient safety.

11. Improve research capacity in the Region.

12. Establish a network of pilot hospitals to share experiences and the lessons learnt in implementing the initiative.

13. Reactivate the patient safety forum.
Annex 1

AGENDA

1. Inauguration
2. Overview of PSFHI
3. Country experiences
4. Tools for PSFHI - assessment manual
5. Insight into improvement in patient safety (patient safety challenges)
6. Insight into improvements in patient safety
   - Patient safety solutions, research, reporting
   - Patient empowerment
   - Expanding PSFHI to other countries in the Region
7. Tools for PSFHI: improvement manual
8. The way forward
Annex 2

PROGRAMME

16 November 2009
08:30–09:00 Registration

Session 1: Inauguration
09:00–09:40 Message of the Regional Director, WHO/Eastern Mediterranean Regional Office, Dr Hussein A. Gezairy, RD, WHO/EMRO
Remarks on the patient safety programme in the Region and GCC countries, Dr Tawfik Khoja
Remarks on the patient safety programme: the role of WHO headquarters, Dr Agnes Leotsakos
09:40–10:00 Introduction to the programme, participants and resource persons, Dr Sameen Siddiqi

Session 2: Overview of PSFHI
10:30–11:00 Overview of the progress on patient safety in the Eastern Mediterranean Region and the PSFHI, Dr Sameen Siddiqi
11:00–11:20 WHO Global patient safety programme: Regional collaboration, Dr Agnes Leotsakos
11:20–11:40 Development of patient safety standards and the assessment manual for the PSFHI, Dr Injy Khorshid
11:40–12:00 Pilot testing of PSFHI in countries of the Region, Dr Sameen Siddiqi
12:00–13:00 Discussion, question and answer

Session 3: Country experiences
14:00–15:30 Country presentations: Benchmarking the level of patient safety in seven pilot hospitals based on the PSFHI assessment manual
- Egypt – Dr Injy Khorshid
- Jordan – Ahmed El Mandhari
- Morocco – Mondher Letaif
- Sudan – Rubina Aman
- Tunisia – Amina Sahel/Mahi El Tehewy
- Yemen – Safaa Qusoos
- Pakistan – Sameen Siddiqi/Rubina Aman
15:45–17:00 Discussion: Lessons learnt, challenges and opportunities for PSFHI
Day 2: 17 November, 2009
8:30–08:45  Introduction to group work for finalizing the PSFHI assessment manual:
  
  Prof Mondher Letaief

08:45–10:30  Group work: Participants will be divided into groups to give final comments on the PSFHI assessment manual based on the experience acquired. Participants will report back on each section of the manual regarding:
  • Overall structure of the assessment manual
  • Technical merit of the standards
  • Applicability
  • Suggestions for improvement

11:00–12:00  Presentation of group work

12:00–13:00  Discussion and conclusion

Session 5: Insight into improvements in patient safety
14:00–14:30  Institutional commitment to patient safety – the organizational set up
  
  Dr Sameen Siddiqi

14:30–15:00  First Global patient safety challenge: Clean Care is Safer Care
  
  Dr Elizabeth Mathai

15:00–15:30  Second Global patient safety challenge: Safe Surgery Saves Lives
  
  Dr Abdel-Hadi Al Breizat

15:30–15:45  Break

15:45–16:15  Tackling antimicrobial resistance and hospital infection
  
  Prof Osama Rasslan

16:15–17:15  Panel discussion – How can hospitals be better organized to ensure implementation of the patient safety challenges?

Day 3: 18 Nov, 2009
Session 6: Insight into improvements in patient safety
08:30–09:00  Patient safety solutions: The work of JCI
  
  Dr Ashraf Ismail

9:00–09:30  Patient safety solutions: WHO perspective
  
  Dr Agnes Leotsakos

09:30–10:00  Patient safety research
  
  Prof Mondher Letaief

10:00–10:30  Empowering patients for better patient safety
  
  Ms Nagwa Metwally

10:30–11:00  Break

11:00–11:30  Establishing a system for reporting of adverse events
  
  Ms Triona Fortune

11:30–13:00  Expanding PSFHI to other EMR countries: facilitated discussion
Session 7 Tools for PSFHI: improvement manual
14:00–14:20  PSFHI improvement manual – tool kit  
  \textit{Dr Injy Khorshid}
14:20–14:30  Introduction to group work – \textit{Mahi El Tehewy}
14:30–15:30  Group work: Participants will be divided into groups to discuss the contents of the PSFHI improvement manual
15:30–15:45  Break
15:45–17:00  Presentation of group work on PSFHI improvement manual

Day 4: 19 November, 2009  
Session 8: The way forward
08:30–08:45  Introduction to the group work on improving patient safety in countries of the Region: Action plan and next steps – \textit{Dr Safaa Qusoos}
08:45–10:30  Group work: Participants will be divided into country groups to develop an action plan for:
- Improving patient safety in Egypt, Jordan, Morocco, Pakistan, Sudan, Tunisia, Yemen
- Establishing the PSFHI in other countries (Afghanistan, Iran, Iraq, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, oPt, Saudi Arabia, Syrian Arab Republic)
11:00–12:30  Presentation of group work and next steps
Annex 3

LIST OF PARTICIPANTS

AFGHANISTAN *
Dr Amina Hashimi
Ministry of Public Health
Kabul

BAHRAIN
Dr Amina Al-Sayegh
Infection Control Specialist
Secondary and Tertiary care
Ministry of Health
Manama

EGYPT
Dr Samia El Nahas
Technical Officer and Director
Technical Inspection Department
General Administration of Quality
Ministry of Health
Cairo

Mrs Kawther Mahmoud Mahmoud
Curative Care Director
Central Administration of Nursing
Ministry of Health
Cairo

Dr Abdel Rahman Abed
Director
Om El-Masreyeen Hospital
Giza

Dr Mohamed Hossam ElDin Ata
Deputy Director
Om El-Masreyeen Hospital
Giza
ISLAMIC REPUBLIC OF IRAN
Mr Seyed Mohammad Sadat Kachooie
Ministry of Health and Medical Education
Tehran

IRAQ*

JORDAN
Dr Abdel Hadi Breizat
Director
Al Bashir Hospital
Amman

Dr Badeea Shamoun
Al Bashir Hospital
Amman

Ms Tamam Ghinme
Head of Operation and Surgery Department
Al Bashir Hospital
Amman

KUWAIT
Dr Rehab Abdul Aziz Al Naqi
Ministry of Health
Kuwait

LEBANON
Mr Joseph Abou Rjeily
Director of Operation Room
American University of Beirut
Beirut

LIBYAN ARAB JAMAHIRIYA*
Dr Ali Aboughrain
Director of Ali Ascar Neurology Hospital
Tripoli
MOROCCO
Dr Battal Samir
Focal Point Molay Youssef Hospital (PSIH)
Casablanca

Dr Milouda Achiakh
Molay Youssef Hospital (PSIH)
Casablanca

Dr El Kettani Chafik
Director of
Casablanca University hospital
Casablanca

Dr Maryam Al-Khussaiby
Programme Manager
Department of Primary Health Care
Muscat

PAKISTAN
Dr Zahid Larik
Director of Planning and Development
Pakistan Institute of Medical Sciences
Islamabad

Dr Anjum Khawar
ENT Department
Pakistan Institute of Medical Science
Islamabad

Dr Shahid Ansari
Director (Administration)
Pakistan Institute of Medical Sciences
Islamabad

OCCUPIED PALESTINIAN TERRITORY
Dr Anan Masri
Ministry of Health
West Bank
QATAR
Dr Hana El-Soubaie
Assistant Executive Director
Hamad General Hospital
Doha

SAUDI ARABIA
Dr Yakoub N. Neyaz
Director General
Quality Assurance Department
Ministry of Health
Riyadh

SUDAN
Dr Elkhatim Elias Mohamed
Director, Quality Directorate
Federal Ministry of Health
Khartoum

Dr Ayda Abdeen Hago
National focal Point for PSFHI
Quality Directorate
Federal Ministry of Health
Khartoum

Dr Ibrahim Sead Ahmed
Khartoum North Teaching Hospital
Khartoum

Mr Ibrahim Mohamed Abdelhadi
Infection Control Nurse
Khartoum North Teaching Hospital
Khartoum

SYRIAN ARAB REPUBLIC*
Dr Ahmed Al-Ouja
Director of Hospitals
Ministry of Health
Damascus
TUNISIA
Dr Mohamed Salah Ben Ammar
Head of service
Hospital Mongi Slim
La Marsa

Dr Mohamed Adel Ben Mahmoud
Project Manager of Quality
Ministry of Public Health
Tunis

Prof. Khelil Guezguez
Director General
Hospital Fattouma Bourguiba
Monastir

UNITED ARAB EMIRATES
Dr Fatima Ibrahim El-Amiri
Medical Director
Al-Qassami Hospital
Gharjah

YEMEN
Dr Naseeb Mansour Almalgam
Director General, Medical Services
Ministry of Public Health and Population
Sana’a

Mr Nasr Ali Ahmed
National Coordinator for Patient Safety
Ministry of Public Health and Population
Sana’a

Dr Saleh Salem
PSFHI Focal Point
Al Wehda Hospital
Aden

Ms Asmaa Ahmed Aklan
Nurse
El-Sab’een Hospital
Sana’a
WHO EXPERTS

EGYPT
Professor Ossama Rasslan
President of the Egyptian Society of Infection Control
Coordinator, Eastern Mediterranean Regional Network for Infection Control
Cairo

Professor Mahi Al Tehewy
Professor of Public Health
Healthcare Quality Unit
Ain Shams Faculty of Medicine
Cairo

Dr Nagwa Metwally
Patients for Patient Safety Champion
Egyptian Red Crescent
Cairo

IRELAND
Ms Triona Fortune
Director of Programmes
International Society for Quality in Health Care (ISQUA)
Dublin 1

JORDAN
Dr Safaa Qsoos
Director of Quality and Manager of Patient Safety Programme
Ministry of Health
Amman

MOROCCO
Dr Amina Sahel
Chief of Ambulatory Care Unit
Directorate of Hospital and Ambulatory Care
Rabat
OMAN
Dr Ahmed Al-Mandhari
Family Medicine and Public Health
Sultan Qaboos University Hospital
Muscat

PAKISTAN
Dr Rubina Aman
Assistant Professor
Intensive Care Unit
Pakistan Institute of Medical Sciences
Islamabad

TUNISIA
Professor Mondher Letaief
Preventive Medicine and Epidemiology unit
University Hospital
Monastir

OTHER ORGANIZATIONS

EXECUTIVE BOARD OF THE HEALTH MINISTERS’ COUNCIL FOR COOPERATION COUNCIL STATES

Dr Tawfik Khoja
Director General
Executive Board of the Health Ministers’ Council
For GCC States
Riyadh
SAUDI ARABIA

Dr Abdel Rahman Kamel Al-Habarawy
Head of the Technical Medical Affairs Department
Executive Board of the Health Ministers’ Council
For GCC States
Riyadh
SAUDI ARABIA
JOINT COMMISSION INTERNATIONAL
Dr Ashraf Ismail
Managing Director, JCI Middle East
Ibn Sina Building, Block B, B503
Dubai Healthcare City
Dubai
UNITED ARAB EMIRATES

INTERNATIONAL ISLAMIC RELIEF ORGANIZATION*
Dr Abdel Aziz Rahmatullah Khoja
Director, Health Care
International Islamic Relief Organization
Riyadh
SAUDI ARABIA

WHO SECRETARIAT
Dr Abdullah Assa’edi, Assistant Regional Director, WHO/EMRO
Dr Ahmed Abdullatif, WHO Representative, Egypt
Dr Ibrahim Abdel Rahim, WHO Representative, Tunisia
Dr Amr Mahgoub, Officer-in-Charge, Libyan Arab Jamahiriya
Dr Sameen Siddiqi, Coordinator, Health Systems Development, WHO/EMRO
Ms Agnès Leotsakos, WHO/ World Alliance for Patient Safety, WHO/HQ
Ms Elizabeth Mathai, WHO/ World Alliance for Patient Safety, WHO/HQ
Dr Jean Bosco Ndhokubwayo, Patient Safety Manager, WHO/AFRO
Dr Madeline Valera, Patient Safety Officer, WHO/WPRO
Dr Sana Naffa, Health System Strengthening Officer, WHO Representative’s Office, Jordan
Dr Muna Hassan Mustafa, WHO Representative's office, Sudan
Dr Muna Al-Mudhwahi, National Programme Officer, WHO Representative’s Office, Yemen
Dr Injy Khorshid, Patient Safety Specialist, WHO/EMRO
Mr Yousef Yousef, IT Assistant, WHO/EMRO
Mrs Hoda El-Sabbahy, Senior Secretary, Health Care Delivery, WHO/EMRO
Ms Sara Georgi, Secretary, Health Care Delivery, WHO/EMRO

* Did not attend