HEALTH CARE-ASSOCIATED INFECTIONS MORE COMMON IN DEVELOPING COUNTRIES

10 DECEMBER 2010 - A first of its kind review of available scientific data on health care-associated infections in countries with limited resources shows this is a major patient safety problem in the developing world and indicates that better surveillance and reporting is essential to understand the magnitude of the problem and address it, according to a new study published today in The Lancet.

These infections can prolong hospital stays, create long-term disability, increase resistance to life-saving medications, drive up costs for patients and their family, and even lead to death.

Although health care-associated infections are estimated to affect hundreds of millions of people globally, precise numbers remain unknown because of the difficulty in gathering reliable data worldwide. While national surveillance systems exist in many high-income countries, they are non-existent in the vast majority of middle- and low-income countries.

“Health care-associated infections have long been established as the biggest cause of avoidable harm and unnecessary death in the health systems of high income countries. We now know that the situation in developing countries is even worse. There, levels of health care-associated infection are at least twice as high,” says Dr Benedetta Allegranzi, Technical Lead for the Clean Care is Safer Care programme at the WHO and author of the study. “One in three patients having surgery in some settings with limited resources becomes infected. Solutions exist, and the time to act is now. The cost of delay is even more lives tragically lost.”

Several factors increase the risk of health care-associated infections, including:

* poor hygiene and waste disposal,
* inadequate infrastructure and equipment,
* understaffing
* overcrowding
* lack of basic infection control knowledge and implementation,
* unsafe procedures, and
* a lack of guidelines and policies.

At the moment, however, there is no system in place in low- and middle-income settings to determine the likelihood and magnitude of the risk of infection associated with each of these factors.

“The number of health care-associated infections should be much lower in high-income countries, because we know what works and we have the means to act. Low- and middle-income countries face many more challenges,
WHO News Release

but this does not mean the problem is insurmountable. Several interventions are simple and low-cost,” says Professor Didier Pittet, Head of the Collaborating Centre on Patient Safety at the University of Geneva Hospitals and author on the *Lancet* study.

Implementing system-wide surveillance, training, education and good communication, using devices appropriately and following proper procedures, and ensuring optimal hand hygiene practices are some of the solutions that must be tailored to the reality of these settings. To be successful, these solutions ultimately require a change of health-care workers’ behaviour - in all settings.

Surveillance is key to the reduction of health care-associated infections. Not only can it point to some issues which can be immediately addressed, it also enables facilities and public health authorities to understand the magnitude of the problem and what interventions are needed, and to assess their impact.

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**MALARIA REPORT SHOWS RAPID PROGRESS TOWARDS INTERNATIONAL TARGETS**

The drive to provide access to antimalarial interventions is producing results

14 DECEMBER 2010 | GENEVA - A massive scale-up in malaria control programmes between 2008 and 2010 has resulted in the provision of enough insecticide-treated mosquito nets (ITNs) to protect more than 578 million people at risk of malaria in sub-Saharan Africa. Indoor residual spraying has also protected 75 million people, or 10% of the population at risk in 2009. The *World Malaria Report* 2010 describes how the drive to provide access to antimalarial interventions to all those who need them, called for by the UN Secretary-General in 2008, is producing results.

**Downward trend in malaria**

In Africa, a total of 11 countries showed a greater than 50% reduction in either confirmed malaria cases or malaria admissions and deaths over the past decade. A decrease of more than 50% in the number of confirmed cases of malaria was also found in 32 of the 56 malaria-endemic countries outside Africa during this same time period, while downward trends of 25%–50% were seen in eight additional countries. Morocco and Turkmenistan were certified by the Director-General of WHO in 2009 as having eliminated malaria. In 2009, the WHO European Region reported no cases of *Plasmodium falciparum* malaria for the first time.

**Results: the best in decades**

The WHO Director-General, Dr Margaret Chan, highlighted the transformation that is taking place, “The results set out in this report are the best seen in decades. After so many years of deterioration and stagnation in the malaria situation, countries and their development partners are now on the offensive. Current strategies work.”

“The phenomenal expansion in access to malaria control interventions is translating directly into lives saved, as the WHO *World Malaria Report* 2010 clearly indicates,” said Ray Chambers, the UN Secretary-General’s Special Envoy for Malaria. “The strategic scale-up that is eroding malaria’s influence is a critical step in the effort to combat poverty-related health threats. By maintaining these essential gains, we can end malaria deaths by 2015.”

**Strategies to fight malaria**

The strategies to fight malaria continue to evolve. Earlier this year, WHO recommended that all suspected cases of malaria be confirmed by a diagnostic test before antimalarial drugs are administered. It is no longer appropriate to assume that every person with a fever has malaria and needs antimalarial treatment. Inexpensive, quality-assured rapid diagnostic tests are now available that can be used by all health care workers, including at peripheral health facilities and at the community level. Using these tests improves the quality of care for individual patients, cuts
down the over-prescribing of artemisinin-based combination therapies (ACTs) and guards against the spread of resistance to these medicines.

**Fragility of malaria control**

While progress in reducing the burden of malaria has been remarkable, resurgences in cases were observed in parts of at least three African countries (Rwanda, Sao Tome and Principe, and Zambia). The reasons for these resurgences are not known with certainty but illustrate the fragility of malaria control and the need to maintain intervention coverage even if numbers of cases have been reduced substantially.

**Work remains to attain targets**

The report stressed that while considerable progress has been made, much work remains in order to attain international targets for malaria control.

* Financial disbursements reached their highest ever levels in 2009 at US$ 1.5 billion, but new commitments for malaria control appear to have levelled-off in 2010, at US$ 1.8 billion. The amounts committed to malaria, while substantial, still fall short of the resources required for malaria control, estimated at more than US$ 6 billion for the year 2010.

* In 2010, more African households (42%) owned at least one ITN, and more children under five years of age were using an ITN (35%) compared to previous years. Household ITN ownership reached more than 50% in 19 African countries. The percentage of children using ITNs is still below the World Health Assembly target of 80% partly because up to the end of 2009, ITN ownership remained low in some of the largest African countries.

* The proportion of reported cases in Africa confirmed with a diagnostic test has risen substantially from less than 5% at the beginning of the decade to approximately 35% in 2009, but low rates persist in the majority of African countries and in a minority of countries in other regions.

* By the end of 2009, 11 African countries were providing sufficient courses of ACTs to cover more than 100% of malaria cases seen in the public sector; a further 5 African countries delivered sufficient courses to treat 50%–100% of cases. These figures represent a substantial increase since 2005, when only five countries were providing sufficient courses of ACT to cover more than 50% of patients treated in the public sector.

* The number of deaths due to malaria is estimated to have decreased from 985 000 in 2000 to 781 000 in 2009. Decreases in malaria deaths have been observed in all WHO regions, with the largest proportional decreases noted in the European Region, followed by the Region of the Americas. The largest absolute decreases in deaths were observed in Africa.

In summary, the report highlights the importance of maintaining the momentum for malaria prevention, control, and elimination that has developed over the past decade. While the significant recent gains are fragile, they must be sustained. It is critical that the international community ensure sufficient and predictable funding to meet the ambitious targets set for malaria control as part of the drive to reach the health-related Millennium Development Goals by 2015.
REVOLUTIONARY NEW MENINGITIS VACCINE SET TO WIPE OUT DEADLY EPIDEMICS IN AFRICA

More than 12 million people in Burkina Faso to receive new vaccine by end of year

6 December 2010 | Ouagadougou - The West African nation of Burkina Faso today became the first country to begin a nationwide campaign to introduce a new meningitis vaccine that promises to rid the entire region of the primary cause of epidemic meningitis. The first vaccine designed specifically for Africa, MenAfriVac is expected to help health workers eliminate meningococcal A epidemics in the 25 countries of the meningitis belt, stretching from Senegal in the west to Ethiopia in the east.

An affordable solution
Priced at less than US$ 0.50 per dose, MenAfriVac is a highly affordable solution to one of the region’s biggest health problems. Using a unique public-private partnership model, the development of MenAfriVac cost only US$ 50 million - a fraction of the amount usually required to develop and bring a new vaccine to market.

450 million people at risk
For more than 100 years, sub-Saharan Africa has suffered from epidemics that exact a terrible and deadly toll. As many as 450 million people are at risk from the disease across Africa. Major group A epidemics occur every 7-14 years and are particularly devastating to children and young adults. The sickest patients typically die within 24 to 48 hours of the onset of symptoms, and of those who survive, 10-20% suffer brain damage, hearing loss or a learning disability. In 2009, the seasonal outbreak of meningitis across a large swathe of sub-Saharan Africa infected at least 88 000 people and led to more than 5 000 deaths.

The beginning of the end of a disease
“This historic event signals the beginning of the end of a disease that has brought sickness and suffering to generations of Africans,” said Seydou Bouda, Minister of Health of Burkina Faso. “The unique collaborative effort that has made this breakthrough possible is both testament to the commitment of ministers of health across Africa and the relentless dedication of our technical partners in developing a vaccine that specifically meets the needs of countries in the African meningitis belt.”

Developed by the Meningitis Vaccine Project (MVP) - a partnership between WHO and PATH, with support from the Bill & Melinda Gates Foundation - the new meningococcal A conjugate vaccine MenAfriVac provides African health authorities, for the first time, with an affordable, long-term solution that protects even young children against meningitis A (group A Neisseria meningitidis).

A unique development model
“The model created through the development of this vaccine is groundbreaking and could not have been accomplished without the joint efforts of the African ministers of health and the many partners and collaborators around the world,” said Dr Christopher J. Elias, President and CEO, PATH. “MenAfriVac may well serve as a model for developing vaccines in the future to combat other deadly diseases in low-resource settings.”

The new vaccine has several advantages over vaccines currently used to combat meningitis epidemics in Africa: it protects children as young as one; and it is expected to both protect from the disease for significantly longer than the vaccine now used to combat epidemics, and to reduce infection and transmission. Reduced transmission in turn protects the larger community, including family members and others who have not been immunized.

“From day one, the development of this vaccine has been a collaboration between industry, institutions, and individuals driven by public health needs,” said Dr Marc LaForce, Director of the Meningitis Vaccine Project. “The successful development of a vaccine in less than a decade is almost unheard of.”

The rapid development of the vaccine is in large part due to the commitment of the Serum Institute of India, Ltd., the vaccine manufacturer. Africans have in the past waited as long as 20 years for a vaccine to travel from the
industrialized north to the nations of the south. In this case, MenAfriVac will be introduced in Africa before it is distributed anywhere else.

The process of developing the new vaccine and planning for its introduction has also helped strengthen systems in Africa for disease surveillance, clinical development, pharmacovigilance and vaccine logistics. Clinical trials, carried out in the Gambia, Ghana, India, Mali, and Senegal, beginning in 2005, have shown the vaccine to be safe and highly effective. Indian regulatory authorities granted marketing authorization for export and use of MenAfriVac in December 2009. In June 2010, the vaccine was prequalified by WHO, which guarantees that the vaccine meets international standards of quality, safety, and efficacy.

A sound investment
“In fewer than 10 years, we have overcome obstacles that have in the past seemed insurmountable,” said Dr Margaret Chan, WHO Director-General. “With a one-time investment to vaccinate populations in all countries of the meningitis belt, nearly 150 000 young lives could be saved by 2015, and epidemic meningitis could become a thing of the past. This is within reach. We must not fail.”

If MenAfriVac is introduced throughout sub-Saharan Africa, the resulting reduction in cases of meningitis is expected to free up more than US$ 120 million in the period up to 2015, money from national budgets which would otherwise be spent on medical costs for diagnosis and treatment. These funds can then be brought to bear on other problems of disease and poverty that weigh so heavily on the region.

The GAVI Alliance has thus far contributed over US$ 85 million to the effort to eliminate meningococcal A meningitis in Africa. Yet, the full promise of the vaccine, to protect people throughout the African meningitis belt, can only be realized if an additional US$ 475 million is mobilized.

“GAVI is delighted to be contributing to funding the new vaccine’s introduction” said Helen Evans, GAVI Alliance Interim CEO. “We very much hope to be able to support the further rollout of MenAfriVac, so that by 2015 populations in all 25 countries of the meningitis belt will be vaccinated against meningitis A.”

The introduction of MenAfriVac in Burkina Faso will be closely followed by introduction in Mali and Niger, two other hyper-endemic countries in the meningitis belt. Vaccine introduction in these three countries has been made possible through the support of a number of funding and technical partners, including the Michael & Susan Dell Foundation, Médecins sans Frontières, and UNICEF. “Having procured the vaccine, UNICEF is working with the Ministry of Health of Burkina Faso and local communities to ensure that this extraordinary campaign is a success,” said Dr Gianfranco Rotigliano, Regional Director of the UNICEF Regional Office for West and Central Africa.

The Meningitis Vaccine Project (MVP)
Established in 2001, the Meningitis Vaccine Project is a partnership between PATH and WHO. Its mission is to eliminate epidemic meningitis as a public health problem in sub-Saharan Africa through the development, testing, introduction, and widespread use of conjugate meningococcal vaccines.