



جامعة النجاح الوطنية
An-Najah National University



Trends & Challenges in Infection Prevention & Control in Palestine

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Introduction

- Out of every 100 patients in acute-care hospitals, **seven** patients in high-income countries and **15** patients in low- and middle-income countries will acquire at least one health care-associated infection (HAI) during their hospital stay.
- On average, **1 in every 10** affected patients will die from their HAI.
- **Up to 30%** of patients in intensive care can be affected by health care-associated infections, with an incidence that is two to 20 times higher in LMICs than in HICs, in particular among neonates

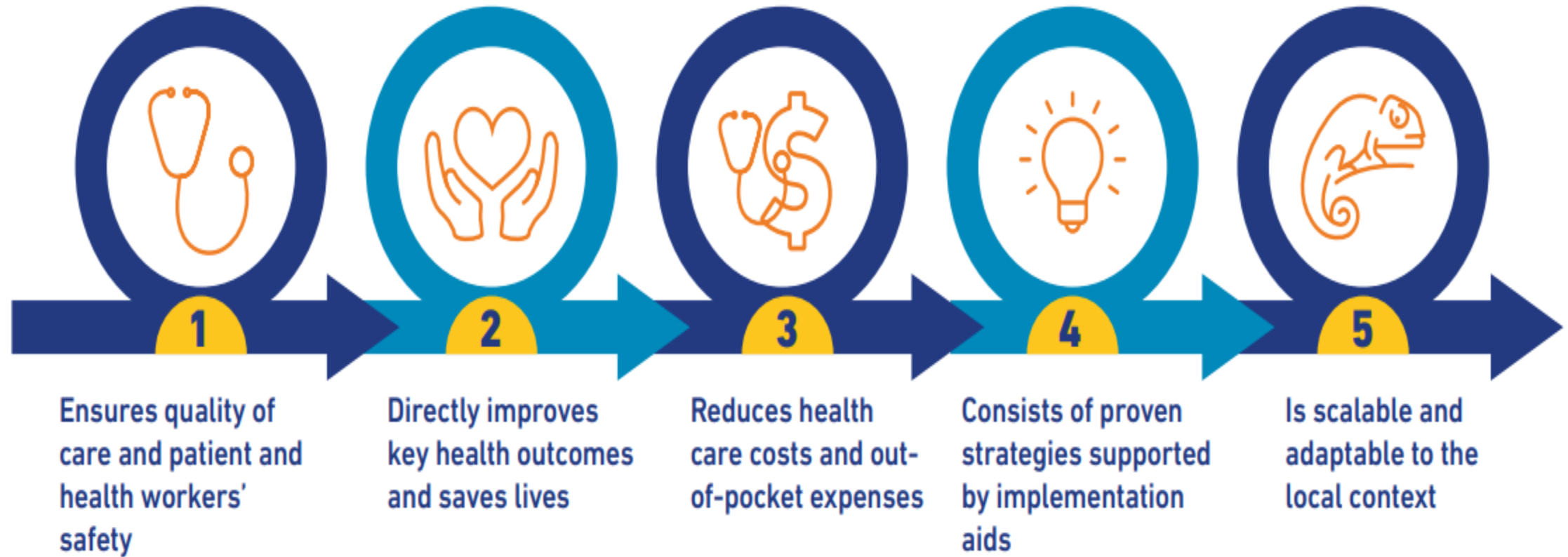


Introduction



- No country or health system, however sophisticated, can claim to be free of HAIs.
- Mortality among patients infected with resistant microorganisms is at least **two to three times higher** than among those infected with sensitive microorganisms.
- Up to 70% of HAIs can be prevented by scaling up an array of effective IPC interventions.
- Investing in IPC is one of the most effective and cost-saving interventions available.

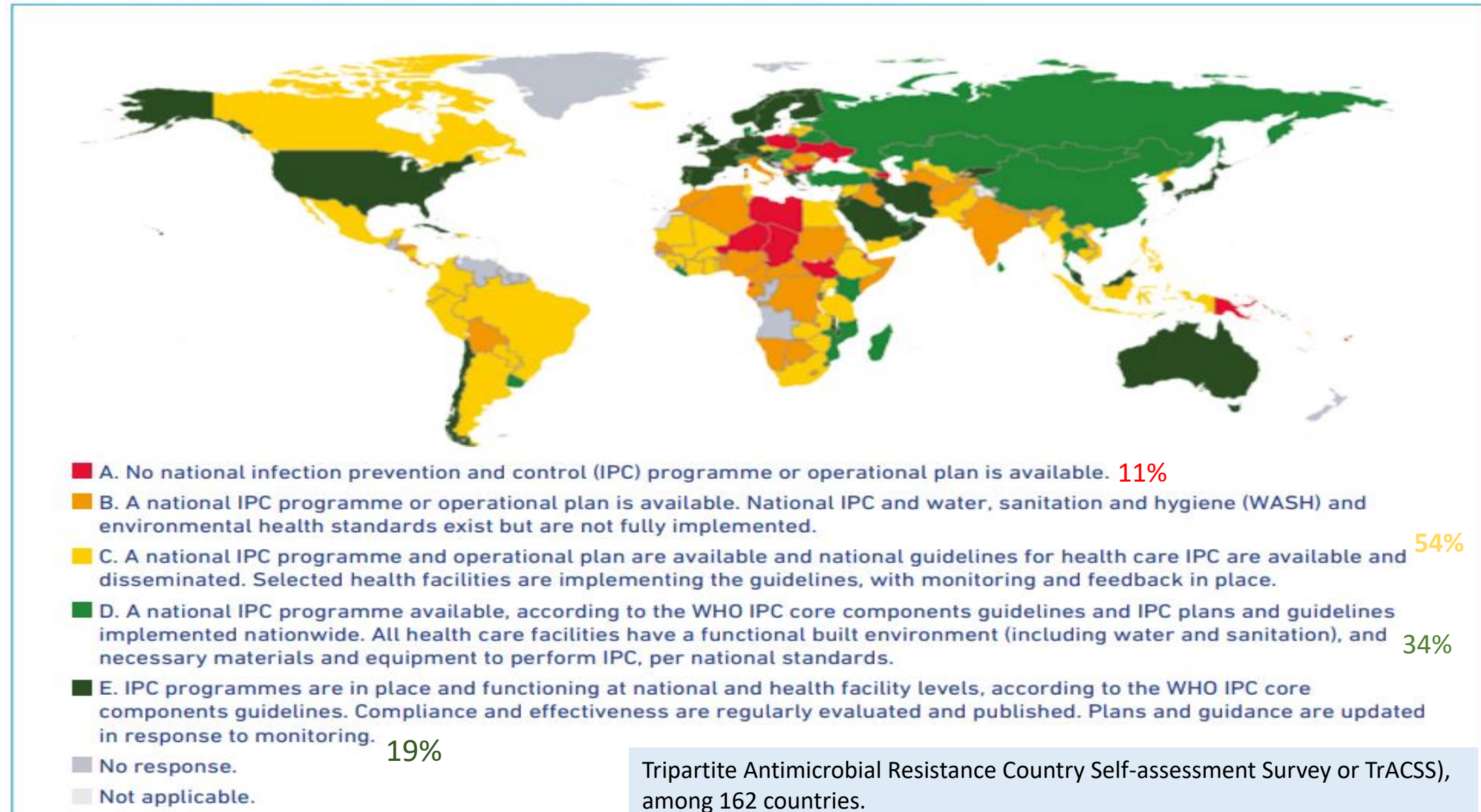
Five main reasons for investing in IPC



Situation analysis of the implementation of IPC around the world



Fig. 1. Country map according to 2020–2021 TrACSS results (indicator 8.1)

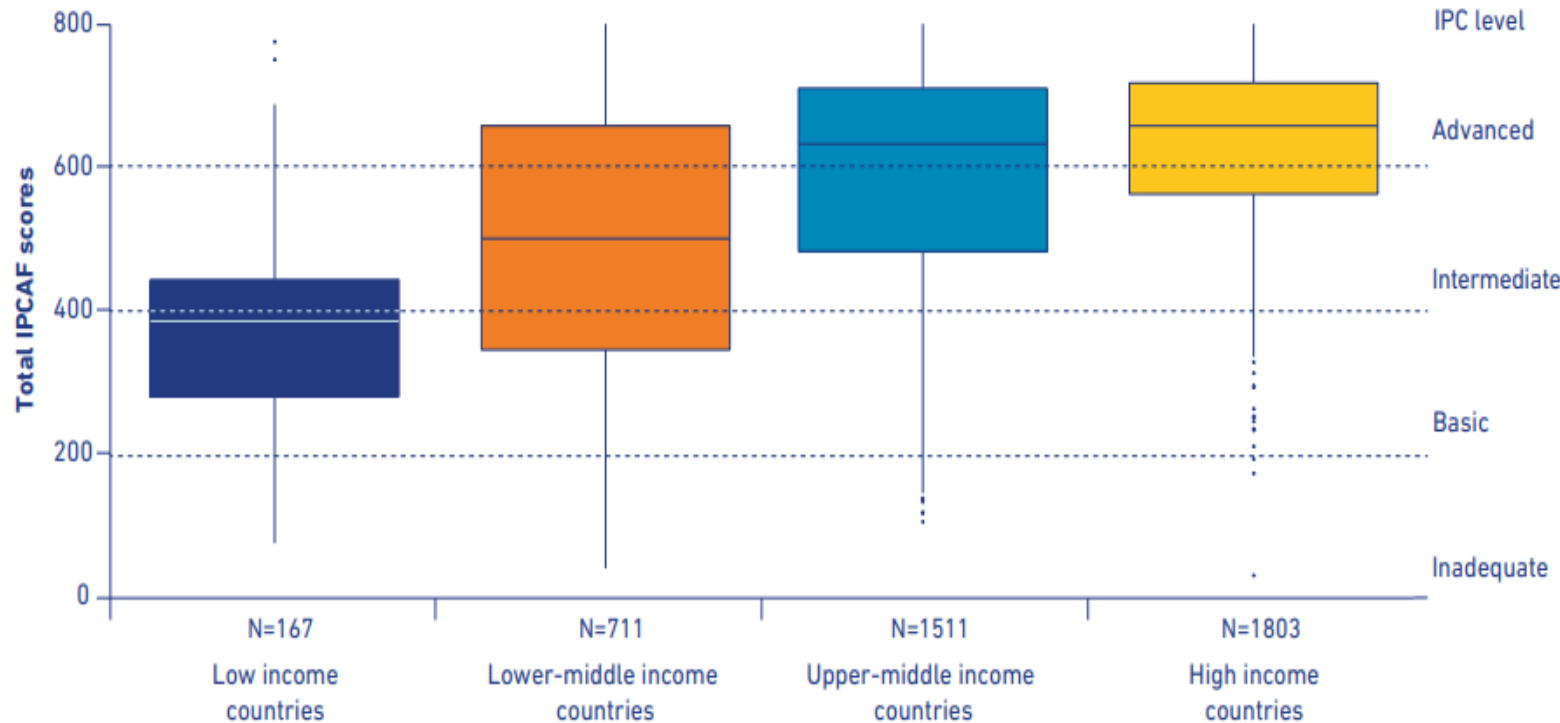




- Active IPC programme (functioning & with annual workplans and budget) existed in 54.7% (58/106) of countries.(WHO,2021-2022).
- Only four of the participating countries (3.8%) met all minimum requirements for IPC.
- According to this survey, relevant gaps were :
 - limited availability of a budget specifically dedicated to IPC,
 - limited support at the national level for IPC training roll-out and monitoring of its effectiveness, and
 - lack of expertise to conduct IPC monitoring



Overall IPC scores, by World Bank income levels of countries participating in the 2019 WHO global survey on IPC programs at the facility level



No facility in any LIC had all the IPC minimum requirements in place.

Only 18.9% of tertiary specialized health care facilities in HICs had implemented all of them.

IPCAF: infection prevention and control assessment framework; IPC: infection prevention and control.

Source: (26).

Challenges



- Even where IPC programs are in place, they are often not able to function appropriately and sustainably in an enabling environment.
- In 2019, IPC programs existed in almost all secondary and tertiary health care facilities. However, particularly in LMICs, the facilities:
 - lacked full-time IPC professionals,
 - an allocated IPC budget,
 - routine microbiological laboratory support, and
 - appropriate workload, staffing and bed occupancy.

What about IPC in Palestine?



> Sultan Qaboos Univ Med J. 2014 Aug;14(3):e375-81. Epub 2014 Jul 24.

Compliance with the national palestinian infection prevention and control protocol at governmental paediatric hospitals in gaza governorates

Ashraf Eljedi ¹, Shareef Dalo ¹

- The most important reasons for non-compliance with the IPC Protocol were the absence of an **education program** (61.5%), **lack of knowledge** (52.4%) and the **scarcity of required supplies** (46.9%).
- Only 2.3% of respondents had a copy of the IPC Protocol, while 65.8% did not know of its existence.
- Only 16.9% had participated in training sessions regarding general IPC practices.

What about IPC in Palestine?



Original Article

Palestinian Medical and Pharmaceutical Journal (PMPJ). 2018; 3(1): 14-23

Evaluation of Compliance to Infection Control Protocols in the Governmental Hospitals in the West Bank/Palestine

Rowa' Al-Ramahi¹, Abd Al Naser Zaid¹, Abdullah Hindi², Abdulqader N'an'a²

¹Department of Pharmacy, Faculty of Medicine and Health Sciences, An-Najah National University, Nablus, Palestine. ² Department of Medicine, Faculty of Medicine and Health Sciences, An-Najah National University, Nablus, Palestine

- Compliance of healthcare providers with ICP is suboptimal.
- The limitations reported included **absence of enough resources** (55.0%), **absence of enough training programs** (49.6%), **absence of clear protocols** (44.1%) and **large number of patients** (44.0%).
- It is recommended to have standardized Palestinian ICP. Education and training programs are highly recommended.

What about IPC in Palestine?



Eastern Mediterranean Health Journal

Article in press

Assessment of adherence to infection control principles among dentists in the West Bank and Jerusalem

Rawan Al-Sharif¹ and Abdullatif Husseini²

- Overall compliance with IPC guidelines was **low**; only 18.5% of respondents reported good compliance.(2019)
- Conclusion: There is a need for substantial improvements in compliance with IPC guidelines by dentists in the West Bank and Jerusalem; **mandatory education and training** regulated by governing institutions would be very helpful.

What about IPC in Palestine?



The International Nosocomial Infection Control Consortium (INICC) Findings

- HAI rates in the Middle East and in low and middle countries (LMIC) are 3 to 5 times higher than in the rate at high income countries.
- 2021: Mortality Rate in ICU patients in LMICs:
 - without HAI it is 17.12% (95% CI = 16.93–17.32),
 - with one HAI is 30.15% (95% CI = 27.70–32.77) to 48.21% (95% CI = 45.57–50.96), and
 - with 3 simultaneous HAIs it is 63.44% (95% CI = 55.99–71.60)



(INICC) Findings

Some of the mortality RFs identified are unlikely to change, such as the income level of the country, facility ownership, hospitalization type, age, and gender.

	aOR	95% CI	P value
Publicly owned facilities	1.31	1.17–1.47	<0.0001
University hospital	1.62	1.40–1.88	0.23

However, some of the mortality RFs identified can be modified; for example, LOS, CL-days, MV-utilization ratio, CLABSI acquisition, and VAP acquisition.

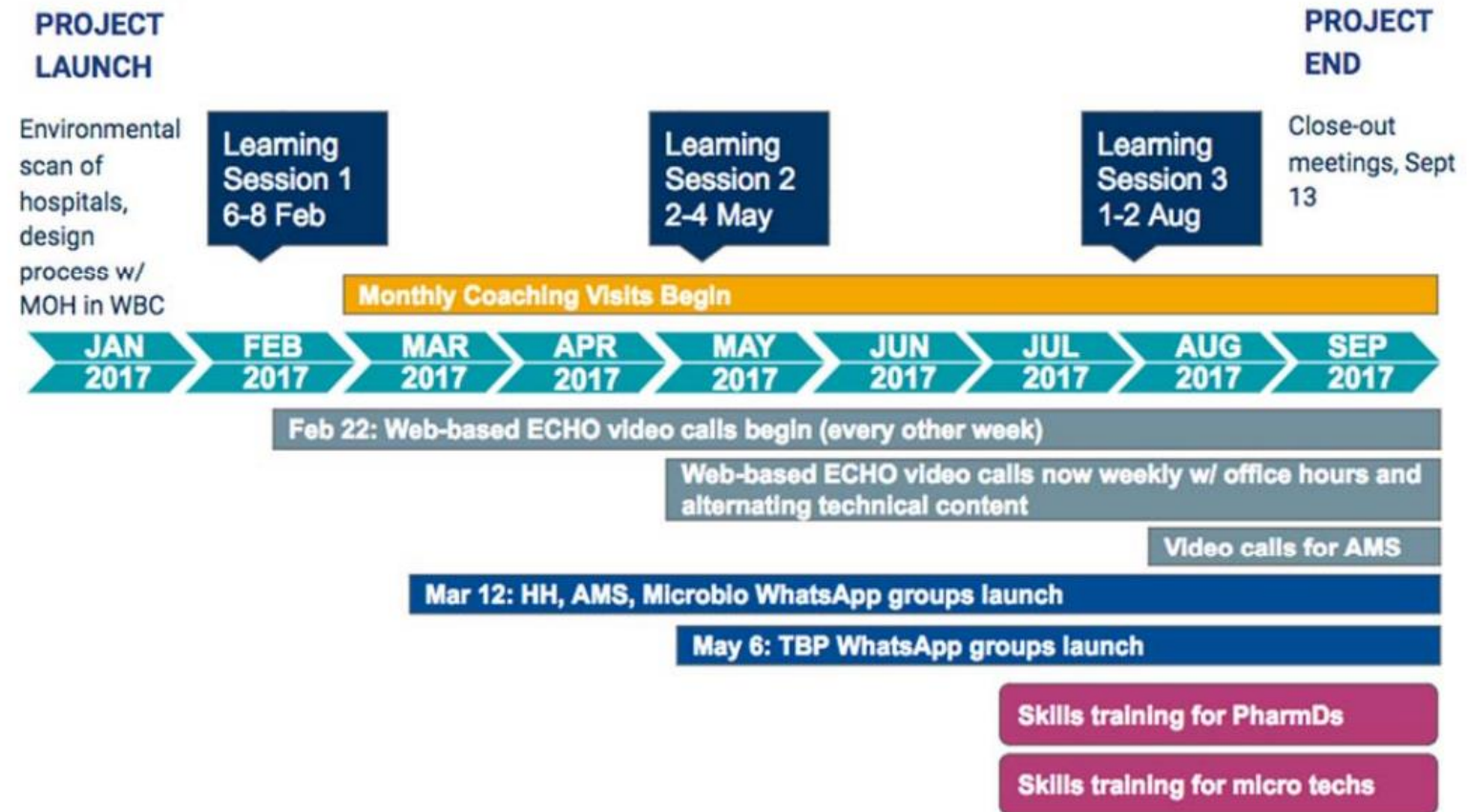
Change is possible!



RESEARCH AND EVALUATION REPORT

Using quality improvement to reduce hospital-acquired infections: Evaluation of the USAID ASSIST Project in the West Bank

Figure 2. Timeline of Project Events





Achievements

1. Use of transmission-based precautions improved from 53% in February to 84% in July.
2. Upward trend in hand hygiene performance in the same period, with **77%** of hospitals performing proper hand hygiene procedures in July, compared to a baseline of 64% in February.
3. In May 2017, of the 16 labs, no hospital correctly identified all the bacteria samples to allow for antibiotic sensitivity testing.
4. By August 2018, 18 hospitals were performing bacterial tests, and 10 of the 18 (55%) correctly identified all bacteria.



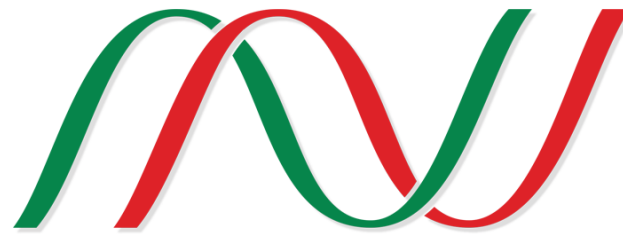
Challenges in WB

1. Poor infrastructure and lack of sufficient space.
2. Shortage of supplies
3. High workload and staffing shortages/turnover
4. The lack of/limited knowledge and awareness on HAI among staff members
5. Obstructive cultural beliefs and attitudes
6. **Urgent need for a full-time infection control officer at all hospitals.**

Response: 1. Training

نظمت وزارة الصحة الفلسطينية بالتعاون مع المعهد الوطني الفلسطيني للصحة العامة تدريب مدربين لنقاط اتصال مكافحة العدوى عدد (12) في مديريات الصحة في نابلس، طولكرم، قلقيلية وجنين وقد تركز النقاش على أهمية مكافحة العدوى في ظل تفشي جائحة كوفيد19 واستجابة فلسطين.

تضمنت موضوعات الجلسات التدريبية التنظيف والتطهير البيئي ، والاحتياطات القياسية ، وإدارة النفايات والتخلص منها ، ونظافة اليدين ، والاحتياطات المتعلقة بنقل العدوى ، والاستخدام السليم لمعدات الحماية الشخصية ، والفرز في مراكز الرعاية الصحية الأولية. سيقوم المشاركون في هذا التدريب بتدريب العاملين الصحيين في محافظاتهم حيث من المتوقع أن يتم تدريب ما يزيد على 150 متدرباً في هذه المحافظات.



المعهد الوطني الفلسطيني للصحة العامة
The Palestinian National Institute of Public Health

2020.

Response: 2. Palestinian IP&C Guide



وزارة الصحة الفلسطينية تطلق الدليل الوطني الخاص بمكافحة العدوى وسلامة المرضى 2022

.The Ministry of Health launched the Palestinian Guide to Infection Prevention and Control, in cooperation with the World Health Organization Deputy Minister of Health, Dr. Youssef Abu Al-Rish stated that universities in Gaza Strip will be addressed to include the guide within the health curriculum and courses, as the Ministry of Health will not approve the profession's practice certificate for students without studying one of the courses prepared for the infection prevention and control guide.

He added that the ministry is seeking to launch a training platform to supervise granted certificates, especially non-governmental institutions, to be licensed to provide their health services.

Response: 2. Professional Academic Degrees In IP&C



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Program Coordinator

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Master's "Infectious Diseases Prevention and Control"

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Master's Degree in Infectious Diseases; Prevention and Control

Bethlehem University / Master's Degree in Infectious Diseases; Prevention and Control

Master's Degree in Infectious Disease prevention and control (MID)

Published on August 7, 2021 Updated on November 16, 2021 Views: 216

AUG & IUG Master's program in IP&C.

Take home message

- IPC is highly cost-effective and a “best buy” for public health as an approach to reducing infections and AMR in health care, improving health, and protecting health care workers .

