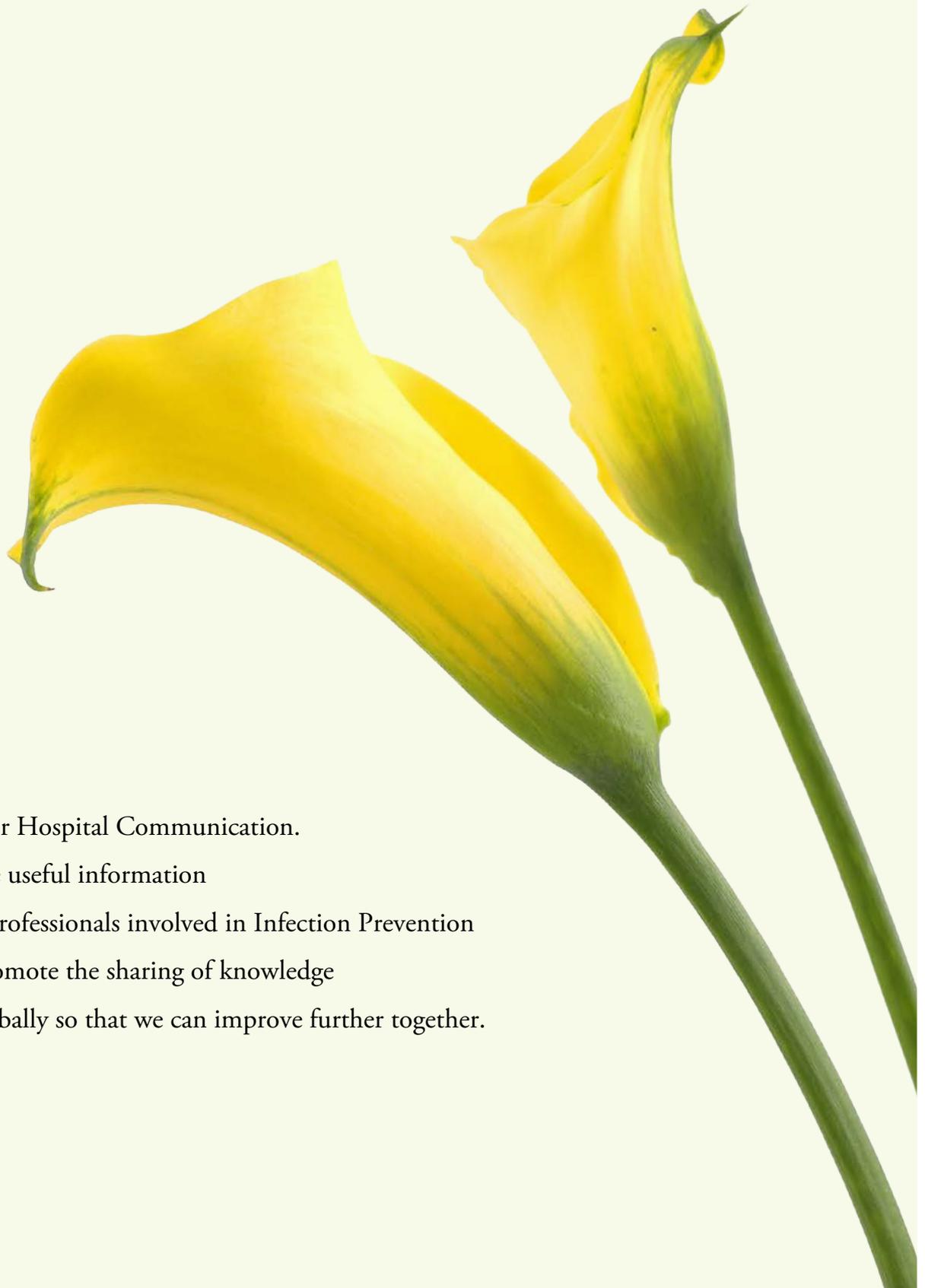


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HosCom stands for Hospital Communication.

We aim to provide useful information to the healthcare professionals involved in Infection Prevention and Control to promote the sharing of knowledge and experience globally so that we can improve further together.

SARAYA

World Information

Challenges and Experiences of Handling COVID-19 in Penang Hospital, Malaysia

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Introduction

Since the first reported COVID-19 case in Malaysia on 25th January 2020, all public hospitals, including Penang General Hospital, have been prepared for the outbreak. Confirmed COVID-19 cases were initially concentrated in Kuala Lumpur with the arrival of international travellers before spreading throughout the country, including Penang. Due to the increasing number of cases, the country was placed under a restrictive movement control order on 18th March 2020. The country faced the toughest challenge during the period between July and October 2021, when the number of cases rose above 20,000 per day, with many still not fully vaccinated against the virus.

Our Challenges

- Inadequate hospital beds in wards and ICUs
- Lack of manpower
- Low oxygen pressure within aging infrastructures
- Low PPE supply, particularly N95 masks
- Positive COVID-19 cases among healthcare staff
- Positive COVID-19 patients diagnosed in non-COVID-19 wards
- Vaccine hesitancy among the public and some healthcare staff
- New surge due to the Omicron variant

Our Experience and Strategies

Preparation of healthcare facilities and manpower

During the early phase, the hospital director promptly called for meetings to bring in all relevant clinical and non-clinical departments, as well as infection control, nursing and engineering representatives. This allowed for unified decision making on how best to convert existing wards into COVID-19 wards, expand ICU services and mobilise manpower. Staff members from other departments were deployed to join the COVID-19 team. Elective surgeries and nonurgent procedures were reduced and even stopped to handle the surge in COVID-19 cases.



Briefing to staff members about expanding beds in the outpatient department



Repurposed ward for COVID-19 patients

Setting up low-risk centres

In the initial phase, all positive COVID-19 patients were required to quarantine in healthcare facilities for monitoring. Several low-risk centres were set up at the hospital and state levels. There was also an outbreak of COVID-19 infections in the prison, which is located next to the hospital, in October 2020. Fortunately, most patients suffered only mild symptoms. Instead of bringing the patients into healthcare facilities, part of the prison was converted into a low-risk centre. Medical staff were deployed to monitor these patients on-site. The majority of the patients recovered without complications, and only a few needed to be transferred to hospital wards.



Setting up a low-risk centre for more stable patients



Turning a dental hostel into a low-risk COVID-19 centre

Handling the Delta wave

The most challenging period was from July to October 2021 when the Delta wave hit the country. Many patients were admitted with severe disease and required oxygen support and ICU care. More than 10 wards were repurposed to manage the surge in patients. Other intensive units (e.g. cardiology, cardiothoracic and plastic surgery) were converted into COVID-19 ICUs to handle severe cases. With the help of the national armed forces, field hospitals were built in Kepala Batas Hospital and Penang General Hospital. These field

hospitals were fully equipped with oxygen-capable beds and high-dependency units. Oxygen pressure was adequate to sustain multiple high-flow nasal cannula machines.



Field hospital set up in the parking area of the hospital



Health staff members after transporting a new case into the field hospital

Waves and vaccines

During the peak, the federal government mobilised staff from the Klang Valley to Penang to assist. These individuals included specialists, medical doctors and paramedics. The COVID-19 cases came in waves. When the numbers declined, the staff members were returned, and the repurposed wards were converted back to normal wards. This allowed the hospital to resume all essential services. Thanks to the rapid national immunization program, almost 80% of the population completed primary vaccination by November 2021. However, the uptake of booster doses was less than 50%. The country was subsequently hit with the Omicron wave, and the daily cases went back up. Fortunately, due to the high vaccination rates, the disease severity was mild, and most patients were allowed to quarantine at home.

Maintaining enough PPE

For PPE, there was no major disruption of supply to our hospital. The management team monitored the usage and supply during the peak. Apart from the supply from the ministry, we were fortunate to receive numerous donations of PPE from various channels. Donors included NGOs, private companies and individuals. However, there were times when certain PPE items, like N95 masks, ran low. To manage this shortage, the staff members were reminded to avoid wastage.

Infection control in the hospital

Infection control is important not just in COVID-19 wards, but also in other non-COVID-19 areas. The infection control team performed regular training and supervision to reduce the risk of transmission in the ward. The hospital adopted a no-visitor policy during the pandemic. If caretakers or family members needed to be in the ward, the number was limited, and they were required to perform a self-test for COVID-19 whenever they entered the hospital. During the surge in cases, many healthcare workers were diagnosed with COVID-19. The majority of them had acquired the infection from the community. This led to manpower shortages and service disruptions. Measures taken to counter this problem included restricting the number of people eating together in the pantry, ensuring compliance with PPE and using virtual platforms to conduct meetings and conferences.



PPE training by infection control team



Regular visits and support to ensure medical staff members were healthy and motivated

NGO support

We were fortunate and grateful to receive significant support from NGOs. Donors connected directly with clinicians on the ground to understand their needs. Medical equipment and consumables were crucial due to the expansion of wards. Donated items included PPE, test kits, high-flow nasal cannula machines, oxygen concentrators, ultrasound machines, X-Ray machines and laptops. We also received other forms of support, including food and moral support.

Recommendations

- Have a contingency plan for case surges
- Recruit more healthcare workers into the COVID-19 workforce
- Train more doctors, including specialists in managing severe and critical COVID-19 patients
- Increase surveillance testing in the hospital to diagnose positive cases earlier
- Improve oxygen pressure capacity in facilities
- Keep staff updated on the latest evidence in the management and infection control of COVID-19
- Maintain the welfare of frontliners
- Increase uptake for adult vaccine booster doses and primary doses for the paediatric population

日本語要約

マレーシア・ペナン病院におけるCOVID-19対応の課題と経験

マレーシアでは、2020年1月に初めてCOVID-19患者が報告されて以降、全ての公立病院にてアウトブレイクに備えた準備を進めてきました。ペナン病院では、院長の呼びかけにより、初期段階からCOVID-19患者の受け入れ体制を構築。当初、陽性者は全て病院施設での隔離が必要だった為、近隣の刑務所の一部を低リスクセンターに変更するなど、患者の受け入れに当たりました。

2021年7月に始まったデルタ株の流行期には重症者が増加し、非常に厳しい局面を迎えました。酸素吸入措置やICUでの治療が必要となり、各科の集中治療室もCOVID-19重症患者のために改修。さらには、国軍の支援により、酸素吸入が可能なベッドと高度治療室を完備した野戦病院が建設されました。これは複数の高流量式鼻カニューラにも十分対応できる施設です。

ワクチンについては、国の迅速な対応により、2021年11月までに8割程の国民の一次接種が完了。その後、オミクロン株の流行により再び感染者数は増加しましたが、接種率が高かった事もあり、重症患者は少なく、多くの患者は自宅療養となりました。

患者の受け入れにあたっては、省庁のみならず、NGO、民間企業、個人など、様々なルートから必要物資の支援、及び精神的なサポートがあった事に感謝しています。

このような難局を乗り越えるためには、「緊急時対応計画を定めておくこと」「十分なスタッフの確保」「COVID-19重症患者に対応する専門医を含む、より多くの医師の養成」「早期診断のためのサーベイランスの増加」「酸素供給体制の強化」「エビデンスに基づいた最新情報の発信」「最前線で働く従事者への福利厚生維持」「ワクチンのブースター接種と小児用ワクチンの一次接種率の向上」に取り組む事が推奨されます。

World Information

The Development of a Long-term Care Infection Prevention Compendium During the COVID-19 Pandemic

Elana Kieffer, MBA /Elaine Larson, RN, PhD, FAAN, FIDSA, FSHEA, FAPIC
Carmen Portillo, PhD, RN, FAAN /Mario Rubano, MPH



Introduction

The first recorded COVID-19 death in the United States occurred in a nursing home (NH) in February 2020¹ – a harbinger of the challenges the long-term care (LTC) sector would face. Since then, over 200,000 residents and staff of long-term care facilities have died due to the illness.² The infection prevention and control (IPC) literature in NHs and LTC settings has lagged behind that of acute care hospitals for decades. This dearth of research, coupled with an already-existing staffing crisis, contributed to the outsized burden of disease experienced in these settings.

At the start of the pandemic, Saraya co., Ltd. communicated with Dr. Elaine Larson, Senior Scholar in Residence at The New York Academy of Medicine (NYAM), regarding their interest to work together examine IPC in NHs for the purpose of identifying strategies that might help improve practice. As a result, in collaboration with the Yale School of Nursing (YSN), a project was completed which included an environmental scan of the infection prevention literature, a series of qualitative interviews of frontline NH staff in New York City, a two-day virtual summit convening international experts in NH infection prevention, and the development of an online Infection Prevention Compendium (Compendium). This paper describes how the Compendium was created and highlights various resources which it contains. See [Figure 1] for a concept map of Compendium contents and structure.

Objectives

- To **describe the process** of developing an Infection Prevention Compendium
- To **summarize the contents** of the Compendium

Development

- The first step was to identify the roles and expertise that would be needed to complete the project. These included: **Project Coordinators** representing NYAM and YSN to oversee the planning and implementation, to facilitate communication between the two institutions.
- **Nurses** with NH experience to inform the selection of resources and ensure the practicality and user-friendliness of the Compendium's design.
- **Nurse Educators** to inform the didactic elements included in the Compendium.

- **Research Assistants** to aide in the collection of resources.
- **Web Developer** to create and maintain the digital infrastructure that would host the Compendium.

Secondly, we created a shared workplan that considered the scope of the entire project and plotted key checkpoints and deadlines. Team members met on a bi-weekly basis. Areas of focus were assigned to individuals with expertise and experience in specific areas of the NH system. For example, a Nurse Practitioner and Director of Nursing with pharmacy and administrative experience searched for materials in the Direct Care Providers and Administrator & Manager categories while a team member with experience in building didactic instruments assembled the educational PowerPoint tools. Team members with real-time clinical experience were important to ensure the relevance and practicality of the selected resources. The resource identification process included combing through the online resources of reliable public health institutions and agencies including the Centers for Disease Control and Prevention (CDC), the World Health Organization, and Institute for Healthcare Improvement, as well as other sources such as peer reviewed journals (e.g., American Journal of Infection Control and Infection Control and Hospital Epidemiology), as well as internet searches.

The third step included the review of resources and the compilation of final selections. Once the resources were identified, the team collectively reviewed the findings for relevance, usefulness, timeliness, validity, and accuracy of hyperlinks. The aim was to create a “one-stop” resource with which NH professionals could locate reliable tools in a timely manner and maximize the amount of time spent addressing the needs of residents.

After deliberation, the final items were organized by category and the title and accompanying hyperlinks were sent to the Web Developer who added the materials to the website in a series of interactive drop-down menus. The final product was reviewed by the internal communications teams of The New York Academy of Medicine, Yale School of Nursing, and Saraya co., LTD. See [Figure 2] for a screenshot of the Compendium homepage.

Dissemination

The efforts of this project culminated in multiple deliverables that were disseminated across a range of formats. A report published on the NYAM website (<https://www.nyam.org/center-healthy-aging/resources/infection-prevention-resources/>), “Infection Prevention and Control in Nursing Homes in the COVID Era: Research, Stakeholder Perspectives, and Best Practices”, summarized the project including a literature review, qualitative interviews with New York City-based direct care providers, and summaries of regulatory and policy

examples from around the globe. Findings were also disseminated through publication in peer-reviewed journals and presentations at conferences:

Geriatric Nursing:

- Rubano, M., Kieffer, E., Larson, E. “Infection prevention and control in nursing homes during COVID-19: An environmental scan.” *Geriatric Nursing* 43 (November 2021): 51-57. <https://doi.org/10.1016/j.gerinurse.2021.10.023>
- Fisher, E., Cárdenas, L., Kieffer, E., and Larson, E. “Reflections from the ‘Forgotten Front Line’: A qualitative study of factors affecting wellbeing among long-term care workers in New York City during the COVID-19 pandemic.” *Geriatric Nursing* 42, no. 6, (November-December 2021): 1408-1414. <https://doi.org/10.1016/j.gerinurse.2021.09.002>

American Journal of Infection Control

- Rubano, M., Kieffer, E., Larson, E. “Long-term care and COVID-19: An equitable recovery”. *American Journal of Infection Control* 50, no. 3, (March 2022): 364-365. <https://doi.org/10.1016/j.ajic.2021.11.010>

Academy Health Annual Research Meeting 2021

- Fisher, E., Cárdenas, L., Kieffer, E., Larson, E. “Long-term care staff experiences during the COVID-19 pandemic: A qualitative study.” *AcademyHealth Annual Research Meeting* (June 2021).
- Additionally, NYAM and YSN hosted two international virtual summits (December 2nd and December 8th, 2020) featuring experts in IPC and public health policy. The goals of the summit were to:
- Critically examine evidence-based practice guidelines for infection prevention and control in skilled nursing and assisted living facilities,
 - Understand key barriers to implementing these best practices, and
 - Propose sustainable regional and global solutions.



Figure 2: Compendium Homepage

The featured presenters included:

Anucha Apisarnthanarak, MD Associate Professor Thammasat University Hospital, Thailand	Evelyn Cook, RN, CIC Associate Director, Statewide Program for Infection Control and Epidemiology University of North Carolina at Chapel Hill United States
Lisa Hall, PhD, SFHEA Associate Professor in Epidemiology University of Queensland, Australia	Karen Hoffmann, RN, MS, CIC, FAPIC, FSHEA Clinical Instructor in the Division of Infectious Diseases University of North Carolina at Chapel Hill, United States
Donald Macaskill, PhD Chief Executive Scottish Care, Scotland	Judith A. Salerno, MD, MS President NYAM, United States
Steven Schween, RN, MPH, MSN, CIC, FSHEA, FAPIC Infection Preventionist Steven J. Schween LLC, United States	Ann Spenard, DNP, RN-BC Chief Clinical Officer National Health Care Associates, United States
Nimalie Stone, MD, MS Medical Epidemiologist for Long-term Care, Division of Healthcare Quality Promotion Centers for Disease Control and Prevention, United States	Patricia W. Stone, PhD, RN, FAAN Centennial Professor in Health Policy and Director, Center for Health Policy Columbia School of Nursing, United States
Michael Wasserman, MD Past President California Association of Long-term Care Medicine, United States	

Utilization

The Compendium was launched in August 2021. To date, the Compendium has been accessed approximately 3,500 times. The compendium has recorded visitors from the following nations (in order of highest to lowest number of visitors):

- United States •Japan •Canada •New Zealand •China •South Korea •Portugal •Nigeria •Australia •United Kingdom •Germany •Egypt •France •Hong Kong •Malaysia •Philippines •Vietnam •Cambodia •Russia •Taiwan •South Africa •Uganda •Rwanda

1. Soucheray, S. Coroner: First US COVID-19 death occurred in early February. Center for Infectious Disease Research and Policy. April 22, 2020. Accessed July 22, 2022.
2. Chidambaram P. Over 200,000 residents and staff in long-term care facilities have died from covid-19. KFF. February 3, 2022. Accessed July 22, 2022. <https://www.kff.org/policy-watch/over-200000-residents-and-staff-in-long-term-care-facilities-have-died-from-covid-19/>

日本語要約

COVID-19流行期の長期療養施設で活用できる感染対策ツールの開発プロジェクト

米国における最初のCOVID-19罹患報告は、2020年2月の高齢者施設からであった。それ以降、20万人以上の長期療養施設の利用者やスタッフが同感染症に関連して亡くなった。高齢者施設や長期療養施設の感染対策に関する研究は急性期病院での研究に比べて少なく、このことも長期療養施設におけるCOVID-19による経験に影響を与えたのではないかと考えられる。そのような中、New York Academy of MedicineとYale School of Nursing、サラヤが共同で、長期療養施設における感染対策に関するプロジェクトを実施した。

まずはプロジェクトメンバーの役割と専門性を明確にし、プロジェクトの全体計画を作成した。隔週でミーティングを開催し、情報収集、教育ツールの作成などを進め、チームメンバーで集められた情報のレビューを行った。熟考の後、活用する情報をカテゴリ別に整理し、Figure 1に示すようにウェブ上に掲載した。(ウェブサイト: <https://www.nyam.org/center-healthy-aging/resources/infection-prevention-resources/>)

本プロジェクトにより、「コロナ禍における高齢者施設の感染対策の報告」といった様々な成果物が生み出され、プロジェクトウェブサイトに掲載、あるいは論文として投稿した。2020年12月にはバーチャルサミットを開催し、感染対策のガイドラインの確認、現状課題の把握、課題解決策に関するディスカッションを行った。プロジェクトの成果物は2021年8月から公開が開始され、2022年7月時点で23カ国から約3,500回のアクセスがあった。

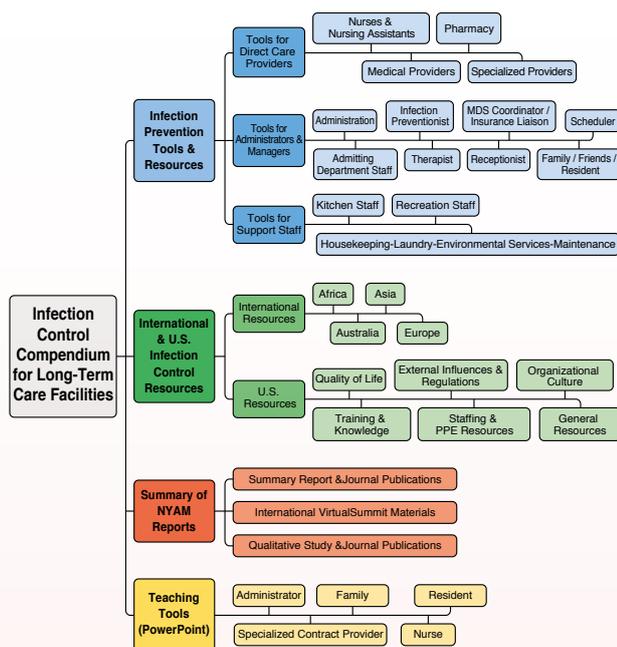


Figure 1: Structure of online Infection Control Compendium for Long-Term Care Facilities

The main risk factors for patient infection associated with endoscopic examinations in Russia

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Introduction

About 14 million endoscopic interventions are carried out in Russia annually, and a few scores of related healthcare-associated infection (HAI) cases are officially registered. The Epidemiological Safety System (ESS) for endoscopic interventions and the method of safety level detection in a particular medical organization have been determined in the country.

Since September 1, 2021, the third version of the national guidelines for ensuring the epidemiological safety of endoscopic examinations [1] (hereinafter referred to as the Guidelines) has been in effect in Russia. The release of this document was preceded by a recurrent survey conducted in 2019, which was completed by 460 doctors and nurses representing endoscopy hospital departments from 80 regions of Russia. The survey contained 47 questions, some of which were not answered by all respondents.

We set ourselves the task of assessing the main risk factors for patient infection during endoscopic examinations to correct the requirements for individual components of the ESS for endoscopic interventions and to control the quality of flexible endoscope reprocessing.

Survey Results

A comparison of the results of questionnaires from 2006, 2014, and 2019 revealed an increase in the annual number of endoscopic interventions, including surgical ones. In 2006, in endoscopy departments, endoscopy examinations were performed an average of 7 times per day. In 2014, there were 15 examinations per day. In 2019, more than 15 examinations per day were carried out by 70% of the surveyed hospitals. Surgical interventions in 2019 were performed in 303 (66.3%) endoscopy departments.

The infectious safety of endoscopes is ensured by the correct operation of reprocessing and compliance with the requirements of the Guidelines. The analysis of the materials obtained from the period 2006-2019 indicates that the system of reprocessing, including technical equipment and material support, is steadily improving. Of the 460 endoscopy departments, 385 (73.7%) have reprocessing rooms. The area for manual cleaning is organized correctly. Reprocessors (EWDs) are used by 300 (65.2%) out of 460 hospitals that were surveyed. In 2014, the use of EWD equipment was



extremely low, amounting to only 22.6% of hospitals.

Disinfectant solutions for manual cleaning of endoscopes prepared on a daily basis are used by 47.4% of hospitals. Single-use detergents based on surfactants are used in 8.7% of endoscopy departments, and with an enzymatic booster, 27.0% of endoscopy departments. The share of ineffective detergents or disinfectants for endoscope cleaning fell from 26% in 2014 to 16.9% in 2019.

Among the high-level disinfection (HLD) chemicals applied, the aldehyde share is 47.9%, 38.7% use peracetic acid (PAA), and the remaining 13.4% use HLD solutions not recommended for such a purpose. There is a tendency to replace detergent and HLD solutions for EWD with cheaper counterparts without their validation in EWDs. More than a third of endoscopy departments do not check the minimum effective concentration of HLD solutions. The main reasons why test strips are not used are that chemical indicators are not developed for the product (10.5% of hospitals) or that they are not purchased (23.7% of hospitals).

Two-stage cleaning (pre-cleaning and manual cleaning) of endoscopes is extremely important to ensure the effectiveness of the subsequent HLD procedure. Among 442 surveyed endoscopy departments, 325 (73.5%) never violate the guidelines for manual cleaning. The analysis showed a low incidence of critical errors during pre-cleaning and manual cleaning (Table 1).

Analysis of the received materials showed that the reduction in the volume of pre-cleaning in 8.9% of endoscopy departments is always associated with time pressure. Refusal to perform a leakage test during manual cleaning is tolerated in nearly a third of EWD-equipped endoscopy departments and is associated with an underestimation of the importance of this step for endoscope damage prevention. Errors



numbered 5- 7 in table 1 also occur predominantly in endoscopy departments equipped with EWDs and are associated with the false belief that the EWD can completely replace manual cleaning.

Table 1 The occurrence of critical errors during pre-cleaning and manual cleaning

No.	Error description	Occurrence*
1	Refusal to flush the system of air or water channels and additional channels during pre-cleaning	8.9%
2	Refusal to perform a leakage test during manual cleaning	29.9%
3	Refusal to carry out manual cleaning before the reprocessing cycle in EWD	1.7%
4	Skipping or reducing of the number of brushing passes	6.2%
5	Reducing the duration of the endoscope soaking in the detergent solution	7.9%
6	Flushing with detergent solution can be skipped before the reprocessing cycle in EWD	2.0%
7	Refusal to using alcohol for additional drying of endoscope channels before the reprocessing cycle in EWD	7.2%

* Respondents answered several different questions regarding endoscope reprocessing, therefore, the table only shows the occurrence of the error.



It is this false belief that sometimes allows brushing to be skipped or the number of brushing passes to be reduced. There is insufficient provision of disposable brushes for reprocessing in most endoscopy departments, therefore, reusable brushes are used in 72.0% of the surveyed hospitals.

Manual final rinsing of gastrointestinal (GI) endoscopes is carried out with tap water in all questioned endoscopy departments. Antibacterial tap water treatment systems (0.2 micron water filters) are not used in 11.7% of EWDs.

In Russia, 70% alcohol is used for additional drying of endoscope canals. This requirement is fulfilled by 92.8% of endoscopy departments. At the moment, this measure cannot be refused due to the low provision of storage cabinets with a drying function (25.4%), insufficient provision of EWDs, and the use of EWDs with unvalidated detergents and HLD solutions.

Quality control of endoscope reprocessing is carried out by visual, instrumental, and microbiological methods with the frequency established by the Guidelines. Among 460 respondents who answered relevant set of questions, 104 (22.6%) do not carry out quality control of manual cleaning, and 8 (1.7%) carry it out with a lower frequency. Among the main reasons for not fulfilling this requirement, the respondents named a lack of effective tests or insufficient information about them (57.6%), as well as a lack of time (29.6%).

Microbiological control of the effectiveness of the endoscope reprocessing cycles is not arranged in 56 (12.7%), and is arranged at a frequency of less than four times a year in 82 (17.9%), of 460 surveyed departments. The main reasons are the high cost of microbiological research (70.5%) and the lack of skills in sampling (29.5%). Of the samples taken, 4.4% do not meet the efficiency criteria. Microbiological control of the efficiency of the EWD self disinfection cycle was arranged in 223 (74.3%) of 300 medical facilities equipped with EWDs. The reasons for the rejection of microbiological monitoring of the effectiveness of self disinfection EWDs are similar to the reasons for the rejection of microbiological monitoring of the effectiveness of the endoscope reprocessing cycle.

In 84.4% of the endoscopy departments surveyed, all or some of the nurses completed advanced training in endoscope reprocessing and HAI prevention.

Conclusion

The 2019 survey allowed the identification of the main risk factors for patient infection associated with the reprocessing of flexible endoscopes and the development of corrective measures that were included in the new Guidelines and a draft of new practical policies. It should be added that respondents representing the endoscopy departments of leading clinics, in response to a question about the main routes toward increasing the epidemiological safety of endoscopic examinations, gave the following answers:

- 1.Improvement of equipment for endoscopy departments, such as EWDs and drying cabinets (76.7%)
- 2.Continuing education of medical personnel on epidemiological safety issues (68.2%)
- 3.Increasing in the number and renewal of endoscopes, and providing a sufficient number of disposable instruments and personal protective equipment (PPE) (46.4%)

Reference

1. Hygiene guidelines: Sanitary rules and norms (SanPiN) 3.3686-21 "Sanitary and epidemiological guidelines for the prevention of infectious diseases", approved by the Resolution of the Chief Public Health Officer of the Russian Federation No. 4 dated 01.28.2021 (https://www.rospotrebnadzor.ru/about/info/news/news_details.php?ELEMENT_ID=18781)

日本語要約

ロシアにおける内視鏡診療による感染の主なリスク要因

ロシアでは年間約1400万件もの内視鏡診療が行われ、数件の医療関連感染(HAI)が報告されている。安全性向上のため、2019年に国内80地域の医療施設の内視鏡診療に携わる460人の医療従事者から、内視鏡再生処理の実情調査を実施した。その結果を基に、我々は内視鏡検査の安全性に関わる国内ガイドラインの見直しを行った。以下に当時の調査結果を一部紹介する。

内視鏡の使用件数は年々増加しており、調査対象のうち7割の病院で内視鏡診療数の1日平均が15件以上にのぼると回答した。ところが調査結果によると、用手洗浄におけるブラッシング工程を省略・短縮、内視鏡漏水テストや洗浄機使用前の用手洗浄の省略、非推奨薬剤の使用やケミカルインジケータの不使用等、不適切な運用の認められる病院があった。またガイドラインでは定期的に洗浄方法のバリデーションを行うよう定められているが、その頻度が低い、またそもそも実施されていない病院も一部あることが分かった。

内視鏡の感染対策は、ガイドラインの遵守で確保されるものである。しかし手間やコストがかかるという理由に加え、洗浄機使用時は事前の用手洗浄が省略できるといった誤解、内視鏡の不具合確認を目的とした漏水テストの意味を理解していない等、知識不足が原因となり、一部の病院では適切な運用がなされていなかった。

こうした調査結果を踏まえ、我々は軟性内視鏡の再生処理に関連する感染の主要危険因子を分析した。結果、ロシア国内の内視鏡検査の疫学的安全性を確保するための国内ガイドラインに是正策と新たな実践方針を追加した。このガイドラインは2021年9月1日から第三版としてロシアで施行されている。

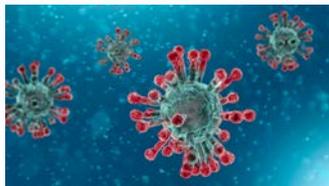
SARAYA Healthcare Hygiene News

Living with the Covid-19 Pandemic in the European Union (EU) and the European Economic Area (EEA) Countries and Countries Opening Up.

Dr. Bonnie OKEKE, Saraya Co., Ltd. Europe, Belgium



Countries across Europe have almost completely eased up on preventive, control and restrictive measures put in place to check the spread of Covid-19 since the inception of the catastrophic pandemic in late 2019 and inflicting over 100 million cases in the EU/EEA countries alone.



After nearly two years of national lockdowns to control the pandemic, countries understandably and excitedly embraced opening up.

Previously restrained life activities have rapidly moved from what was referred to as a new normal to the real normal, including major large sporting events, such as the recently ended 2022 UEFA European Women's Football Championship and the Qatar 2022 FIFA World Cup, musical concerts, travels, and so on.



Picture showing passengers rushing to board trains at a major train station in Paris, France, after the relaxation of Covid-19 rules in France.

Qatar 2022 FIFA World Cup has fully regained its pre-pandemic vibrancy. Spectators enjoying and cheering at the World Cup finals between the French and Argentinean national men's football teams. The usual social distancing seemed no longer of any concern in these public gatherings.



What are the infection prevention and control (IPC) consequences of this apparently rapid normalcy?

Although reliable data remain scarce, scientists and epidemiologists have modelled a positive upward trend in the spread of Covid-19 infection in several European countries following the rapid opening of socio-economic activities.

The wearing of masks in public places, social distancing, handwashing and the use of alcohol hand rubs are now

only encouraged or voluntary. Legal enforcement looks like a distant past across Europe.

Some countries have completely opened up, leaving every aspect of the IPC precautionary measures as voluntary. The danger of the spread of disease is that when the preventive and control actions are voluntary and not enforced by law, regulations or even by an active campaign, only a small minority of the population tends to adhere, usually among the medically vulnerable individuals with other underlying conditions. New infections have been observed to be driven by the emerging Covid-19 virus variants.

Reasons for continuing adhesion to preventive and control measures often vary among individuals and may be due to the need to continue protection as a result of other underlying health problems to characteristically behavioural personal choices and self-enforced social discipline and/or norms.

What are the symptoms of infection with emerging virus variants?

Although new Covid-19 variants have emerged, the symptoms are still the same or very close to the familiar ones, with different degrees of variation, and include:

- Fever
- Cough
- Sore throat
- General weakness, fatigue and muscle pain
- Loss of smell and taste

Some individuals may still be asymptomatic, that is, showing no signs of the disease while carrying and, in other cases, spreading the virus.

Data from some European countries also suggest that an infection by the new variants is less likely to lead to hospitalisation, particularly among persons classed as fully vaccinated members of the population. Hence, some countries allow only fully vaccinated as part of the entry requirements, although this seems increasingly unenforced in many parts.

It is also critical to avoid what has been referred to in IPC circles as campaign or enforcement fatigue, where indifference sets in or even outright oppositions to IPC measures and/or campaigns. Human behavioural impact must be assessed and considered to maintain a good and consistent outcome.

What are the observed case situations in parts of Europe?

As a part of ongoing European health policy measures, a joint European Centre for Disease Prevention and Control (ECDC, an agency of the European Union) and World Health Organisation (WHO) report on the new Covid-19 infections in the European Region in week 47/2022 showed a decrease of 3.5% (871,728) in newly confirmed Covid-19 cases and a reduction of 35.2% (2,238) of new deaths reported by national authorities. Although this is a significant reduction from the previous situation, it shows that Covid-19 is still very much around, and preventive measures should be encouraged.

There is a wide ongoing variation in infection levels among European countries. Some of the variations have been attributed to a lack of or inadequate surveillance and real-time data reporting. There is also the emerging challenge of separating the high annual winter flu and Covid-19 infection mixtures.

Among eight countries that reported test positivity rates weekly, the highest observed level was >20%, four countries (Finland, France, Hungary and Sweden) had increased test positivity compared to the previous week, one country had a decrease (Iceland) and three remained stable (Germany, Luxembourg and Netherlands). More recent data still indicate high variability in infection and hospitalisation in various countries.

Although increases are being recorded with a mixture of high flu levels, the overall picture is still highly variable among European countries.

What is the situation in hospitals and intensive care units (ICUs)?

High variability also exists in data from various ICUs. Data from eighteen countries in the last two weeks under review were mixed. New hospital admissions due to Covid-19 increased compared to the previous week. Infection decreased in ten countries and remained stable in four (Estonia, France, Greece and Netherlands).

In the 12 countries reporting over the same two weeks, new ICU admissions due to Covid-19 had increased in four countries compared to the previous week (Estonia, France, Latvia and the Netherlands), decreased in five (Greece, Lithuania, Luxembourg, Spain and Ukraine) and remained stable in one (Ireland).

How many SARS-CoV-2 variants or the Omicron virus are recognised in Europe?

Virus sequencing and identification are ongoing exercises among EU and EEA member states, and new variants are still being added to the existing list. So far, the following six viral variants have been actively monitored and reported to the ECDC database:

- Omicron BA.2
- Omicron BA.2.75
- Omicron BA.4
- Omicron BA.5
- Omicron BQ.1
- Omicron XBB

The disease manifestation in infected patients may appear similar, despite their inherent structural differences.

The viral sequencing work is regularly ongoing in various countries, so new ones are likely to continue to be added as the virus fights back control measures through its built-in genetic mutation mechanisms.

This is a main reason to have continuous, not continual, effective IPC measures in place, including the application of alcohol, handwashing, rubbing with alcohol-based products, social distancing where appropriate, intelligent use of masks in crowded and enclosed places and surface disinfection with appropriate agents.

What does the future hold in the IPC?

The key question some have asked is, “Are countries over relaxing rules too quickly?” This suggests an epidemiologically arguable gradual opening with active encouragement and support of testing and precautionary hygiene measures, including regular handwashing with soap and water, use of alcohol hand rubs, such as SARAYA’s Alsoft VB with broad spectrum antiviral efficacy, maintaining the practice of social distancing, and wearing appropriate face masks, particularly in crowded places or rooms when with people outside our social bubbles.

Evidence from several countries continues to show an upward trend in key statistical measures, such as new infections, infection rates and hospitalisation. A compounding effect from a severe seasonal winter flu is also recognised in some EU countries, including the UK. Hence, there is a need to maintain and enhance existing multimodal hygiene to continue protecting the entire population.

References

- ECDC - Joint ECDC-WHO Regional Office for Europe Weekly COVID-19 Surveillance Bulletin <https://worldhealthorg.shinyapps.io/euro-covid19/>
- UK Health Security Agency <https://www.gov.uk/government/news/back-to-school-advice-issued-amid-high-levels-of-flu-covid-19-and-scarlet-fever>



Dry and rough skin bothering you?

Tips to prevent rough hands for healthcare workers

- **Select hand hygiene products that are less likely to cause rough hand**
 Use a hand disinfectant that contains a moisturizer that is appropriate for you
 Use soap that is gentle on skin
- **Reduce irritating hand hygiene practices**
 Rinse thoroughly after hand washing with soap and running water
 When wiping hands, use a paper towel and gently press against the towel
- **Use hand care products**

Hand Care	
	<div style="background-color: #f08080; color: white; padding: 5px; margin-bottom: 10px;">Alsoft Hand Cream</div> <p>Hand cream developed for healthcare workers</p> <ul style="list-style-type: none"> • Protects and moisturizes hands • Does not leave a sticky residue • Does not affect the performance of hand disinfectant or gloves • Contains emollients that prevent skin irritation • Colorless and fragrance-free <div style="text-align: right; margin-top: 10px;">  </div>
	<div style="background-color: #f08080; color: white; padding: 5px; margin-bottom: 10px; text-align: center;">Dedicated Dispenser for Alsoft Hand Cream</div> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <div style="border: 1px solid #f08080; border-radius: 10px; padding: 5px; margin-bottom: 10px;"> <p>Automatic Dispenser</p> <p>When you hold out your hand, the sensor automatically detects and dispenses gel/lotion with no touch</p> </div> <div style="border: 1px solid #f08080; border-radius: 10px; padding: 5px; margin-bottom: 10px;"> <p>Compact</p> <p>Compact tabletop type that can be placed in a small space</p> </div> <div style="border: 1px solid #f08080; border-radius: 10px; padding: 5px;"> <p>Functionality</p> <p>Transparent front makes it easy to see what's inside</p> </div> </div> </div>

How to apply hand care products (example)

Preparation

If hands are visibly dirty, wash hands to remove dirt

How to



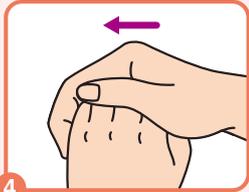
1 Put a small amount of hand care product on your hand.



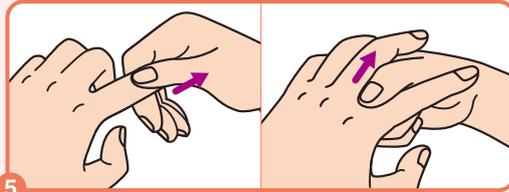
2 Spread on both palms while warming with body temperature.



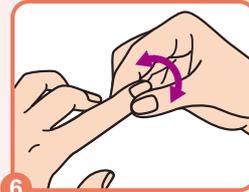
3 Spread from the back of your hand to fingertips.



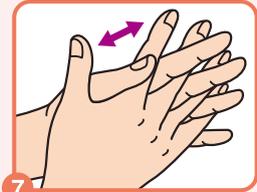
4 Bend your fingers, wrap your fingers in your palm, and spread along the crease.



5 Apply by stretching the joints and crease. Massage between fingers.



6 Apply while massaging the fingertips (around the nails) intensively.



7 Spread over hands until dry.

Hand Soap



Alsoft Foaming Hand Soap

Fragrance-free antibacterial soap

- Emollients keep skin moisturized
- Natural potassium soap based



Alsoft Foaming Hand Soap G

Antibacterial soap with green apple fragrance

- Emollients keep skin moisturized
- Natural potassium soap based



Hand Disinfection



Alsoft VB / Alsoft Liquid Hand Disinfectant B

Hygienic and surgical hand disinfectant

- Contains moisturizers with excellent skin feel (clean and smooth)
- Formulation containing two kinds of alcohol and Phosphoric Acid, resulting in excellent bactericidal and virucidal effect



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NORTH AMERICA / SOUTH AMERICA

- Best Sanitizers, Inc.
URL: <http://www.bestsanitizers.com/>
- Saraya International, Inc.
- Saraya USA, Inc.
URL: <http://www.lakanto.com/>
- Chagaroot, Inc.
URL: <https://chagaroot.com/>
- Saraya Natural Products Co., Ltd.
- Saraya Hygiene de Mexico S.A. DE C.V.
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URL: <https://www.mystairhygiene.com/>
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- Saraya Germany GmbH
- Saraya CIS LLC.
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- Saraya Ukraine LLC.
URL: <http://www.saraya.com.ua/>

AFRICA/MIDDLE EAST

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- Saraya Beauté et Santé
- Saraya Natural Products Tunisia
- Saraya Middle East for Industrial Investment J.S.C.
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