Impact of a bundle of hand hygiene-related interventions in nursing homes on the infectious risk.

Submission date 08/07/2015	Recruitment status No longer recruiting	 Prospectively registered Protocol
Registration date 20/07/2015	Overall study status Completed	 Statistical analysis plan [X] Results
Last Edited 24/07/2020	Condition category Infections and Infestations	[_] Individual participant data

Plain English summary of protocol

Background and study aims

In nursing homes, the infectious risk for residents is high, making infection control using approaches such as hand hygiene (HH) a major issue. However, the effectiveness of HH to reduce the infectious risk in nursing home settings is not well documented and compliance with HH recommendations often remains low. The objective of this study is to investigate how HH may lower the risk of infections among nursing home residents.

Who can participate?

All residents and staff in the nursing homes participating in the study.

What does the study involve?

The participating nursing homes are randomly allocated to two groups. In the first group, standard infection control practices are used. In the other group, a bundle of interventions related to HH are implemented, including staff education, HH promotion and increased availability of hand-rub solution. Antibiotic prescriptions, as well as glove and hand-rub solution use, are monitored in all participating nursing homes over the study period.

What are the possible benefits and risks of participating? Nursing homes from the intervention group will benefit from free access to hand-rub solution, as well as material for HH promotion and staff education. There are no risks to participating.

Where is the study run from? Nursing homes in France run by the Korian group.

When is the study starting and how long is it expected to run for? January 2014 to March 2015

Who is funding the study? Funding was provided by Institute of Ageing Well Korian and Korian Medica (France) Who is the main contact? Laura Temime laura.temime@cnam.fr

Contact information

Type(s) Scientific

Contact name Prof Laura Temime

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers N/A

Study information

Scientific Title

Impact of a multifaceted intervention for hand-hygiene in nursing homes: a cluster randomized controlled trial.

Study objectives

It is hypothesised that increasing compliance to hand hygiene recommendations among the staff and residents in nursing homes may lead to a reduction in the infectious risk for residents.

Ethics approval required

Old ethics approval format

Ethics approval(s)

No ethics approval required, as the study did not change patient care, include new drugs or medical devices or add any procedure for patients. In addition, no sensitive data was collected.

Study design

Clustered randomized controlled trial

Primary study design Interventional

Secondary study design Cluster randomised trial

Study setting(s) Other

Study type(s) Prevention

Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied

Epidemics of acute respiratory infections and acute gastro-enteritis; hospitalizations; deaths

Interventions

Nursing homes are randomly assigned to the intervention or control arm.

1. Control arm: nursing home use standard infection control practices

2. Intervention arm: a multifaceted hand-hygiene intervention is implemented. The key elements of the multifaceted intervention are the following:

2.1. Increased availability of alcohol-based hand-rub for the staff as well as for residents and visitors

2.2. An educational program for the staff based on e-learning

2.3. The creation of a work group within each nursing home which will propose a list of local recommendations

2.4. A hand hygiene promotion campaign aimed at the staff, as well as at residents and visitors

Intervention Type

Behavioural

Primary outcome measure

 Total number of cases of acute respiratory infections and acute gastro-enteritis that are reported to regional health agencies (ARS) in the context of clustered cases episodes
 Episodes of clustered cases are defined as at least 5 cases over 4 days

Secondary outcome measures

1. Number of antibiotic prescriptions for 1000 resident-days (measured at 0, 6 and 12 months)

- 2. Mortality rate (measured at 0, 6 and 12 months)
- 3. Hospitalization rate (measured at 0, 6 and 12 months)
- 4. Hand hygiene compliance assessed by direct observation at 0, 6 and 12 months

Overall study start date

01/01/2014

Completion date

31/03/2015

Eligibility

Key inclusion criteria

For the primary outcome: all residents in the participating nursing homes
 For the secondary outcomes and the intervention: all residents and staff in the participating nursing homes

Participant type(s) Patient

Age group Senior

Sex Both

Target number of participants 26 nursing homes (13 per arm), with an average of 80 residents per nursing home.

Key exclusion criteria Anyone not a resident or staff member in any of the participating nursing homes.

Date of first enrolment 01/01/2014

Date of final enrolment 01/03/2014

Locations

Countries of recruitment France

Study participating centre Korian Les Jardins d'Alesia 187 bis Avenue du Maine Paris France 75014

Study participating centre Korian Hameau du Roy 16 Boulevard Saint-Antoine Le Chesnay France 78150

Study participating centre Korian L'Age Bleu 7 Grande Rue Roubaix France 59100

Study participating centre Korian La Goélette 34 Rue Surcouf

Équeurdreville-Hainneville France 50120

Study participating centre Korian Reine Mathilde 4 Rue des Hauts Vents Grainville-sur-Odon

Grainville-sur-Odon France 14120

Study participating centre Korian Le Castelli Rue des Lauriers L'Huisserie France 53970

Study participating centre Korian Les Meunières

Place Denfert Rochereau Lunel France 34402

Study participating centre

Korian Les Blés d'or

Lieu dit La Mouline Castelnau-de-Lévis France 81150

Study participating centre Korian Mas de Lauze 17 Chemin du Puits de Louiset

Nîmes France 30900

Study participating centre Korian Frontenac Rue Diderot Bram France 11150

Study participating centre Korian Les Annabelles 1 Rue du Diapason Lyon

France 69003

Study participating centre Korian L'Astrée 26-28 Rue de Molina Saint-Etienne

France 42000

Study participating centre Korian Vill'alizé 2 Rue des Chenevières Thise France

25220

Study participating centre Korian Villa Victoria

Le Clos -Vincent 20 Rue du Dr Jean Vaquier Noisy-le-Grand France 93160

Study participating centre Korian Les Arcades 116 Avenue Daumesnil Paris France 75012

Study participating centre Korian Hauts de Jardy 1 Allée des Lauriers Vaucresson France 92420

Study participating centre Korian Au Fil du Temps 2 Rue de Condé Meaux France 77100

Study participating centre Korian Nymphéas Bleus 15 Avenue Pierre Mendès Vernon France 27200

Study participating centre Korian Le Jardin 121 Avenue des Martyrs de la Résistance Rouen France 76100

Study participating centre Korian Catalogne 18 Cours Lazare Escarguel Perpignan France 66000

Study participating centre Korian Lo Solelh 46 Avenue Enseigne Albertini Béziers France 34500

Study participating centre Korian Les Alpilles Centre Urbain, Rue Hilaire Touche Vitrolles France 13127

Study participating centre Korian Les Parents 22 Rue Vandel Marseille France 13008

Study participating centre Korian Sorgentino 52 Rue Auguste Gal Nice France 06300 **Study participating centre Korian Villa Janin** 9 Rue du Treyve Saint-Etienne France 42000

Study participating centre Korian L'isle Verte 50 Rue de Mortillet Grenoble France 38000

Study participating centre Korian Villa d'Albon 13 Avenue Gambetta Roanne France 42300

Sponsor information

Organisation National Conservatory of Arts and Crafts (Conservatoire National des Arts et Métiers)

Sponsor details 292 rue Saint-Martin Paris France 75003

Sponsor type University/education

Website http://www.cnam.fr

ROR https://ror.org/0175hh227

Funder(s)

Funder type Industry

Funder Name Institute of Ageing Well Korian (Institut du bien vieillir Korian)

Funder Name

Korian Medica

Results and Publications

Publication and dissemination plan

We intend to submit for publication at least one paper describing our study and its main results regarding the impact of the hand hygiene intervention that was implemented on hospitalization and mortality rates.

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Results article</u>	results	01/02/2018	24/07/2020	Yes	No