Preventing Covid 19 infection and early defence to stop transmission

Thursday 19th November 2020
7pm – 8.30pm

Online webinar series hosted jointly by ONMSD and the National Integrated Care Programme Older Persons.
As part of COVID 19 Pandemic Response.

Identifying COVID 19 presentations in NH residents – case presentations

Dr Alan Martin
Chair RCPI NH subgroup

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Dr Alan Martin

Consultant Geriatrician

Beaumont Hospital

Identifying COVID 19 presentations in nursing home residents

Case 1

- 85 year old woman
- Background history of Vascular Dementia/ Type 2 DM/ Hypertension
- Presents with Fatigue, lethargy, increased confusion
- Off food x 2 days, not getting out of bed
- No fever, hypoxia
- Urine dipstick: + nit, +leuk, +prot

Case 1

- Clinical issues:
  - Clear diagnosis of hypoactive delirium but no clear cause
  - UTI: red herring; potential delay in diagnosis
  - Needs:
    - COVID swab
    - Bloods: look for lymphopaenia/ elevated CRP/ renal function/ Liver function

- Therapeutic options
  - Parenteral fluids
  - Nutritional support
  - LMWH (https://hse.drsteevenslibrary.ie/Covid19V2)
  - Close monitoring

Case 2

- 79 year old man
- Background of Chronic heart failure/ COPD/ CKD
- Presents with Nausea, vomiting, diarrhoea
  - No fever/ hypoxia
  - BP normal but HR 100bpm regular
  - Stool C+S/ C diff/ Norovirus sent: results awaited

Case 2

- GI presentation much more common in COVID in nursing homes
  - Up to 25%
  - Maybe prodrome to respiratory symptoms

- Therapeutic options
  - Nutritional/ hydration support
  - Parenteral fluids
  - In general: avoid antidiarrhoeals but in COVID???
  - Consider LMWH

Case 3

- 90 year old man
- Background: Stroke, Osteoarthritis, falls, mild cognitive impairment
- COVID diagnosis 3 weeks ago
- Initially asymptomatic
- Day 8: Fever, dyspnoea x 3 days:
- Advance planning: not for ICU/ CPR
- Settled by Day 11
- Day 14 remains lethargic, appetite low
- Day 21: cough, Sats 90% on room air, drowsy,

Case 3

- Acute respiratory deterioration
  - Less likely COVID given initial recovery
  - Differential diagnosis:
    - Healthcare acquired pneumonia
    - Aspiration pneumonia
    - Pulmonary embolus
    - Congestive cardiac failure
  - Confusion around transfer to hospital
  - Needs clinical examination and routine investigations

ELSEVIER

Journal of Infection
Volume 81, Issue 3, September 2020, Pages 411-419

SARS-CoV-2 infection, clinical features and outcome of COVID-19 in United Kingdom nursing homes

ownes [d], C. Sendall [d], H. Lai [a, b], A. McKirdy [e], P. Elliott [f, g], nan [l, m, a], M. Ciechonska [l, m, a], L. Cameron [m, a], M. nt [l, m, a], P. Randell [n, o], R. McLaren [p], N. Lang [q] ... D.J.

Table 3
Clinical symptoms and SARS-CoV-2 rt-PCR test status.

	Any result		Negative		Positive		*P*	Statistic	
	N	%	N	%	N	%			
Residents tested	313	–	187	59.7	126	40.3	–	–	–
Deaths	29	–	8	4.3	21	16.7	0.0004	$\chi 2$	12.3
Symptom information									
Symptomatic	109	34.8	37	19.8	72	57.1	<0.0001	$\chi 2$	44.7
Asymptomatic	204	65.2	150	80.2	54	42.9	–	–	–
N symptoms, mean (SD)	0.7 (1.1)	–	0.3 (0.7)	–	1.2 (1.3)	–	<0.0001	W	16542.0
Any typical symptom	73	23.3	23	12.3	50	39.7	<0.0001	$\chi 2$	30.1
Any atypical symptom	73	23.3	22	11.8	51	40.5	<0.0001	$\chi 2$	33.1
Typical symptoms only	35	11.2	14	7.5	21	16.7	0.019	$\chi 2$	5.5
Atypical symptoms only	35	11.2	13	7.0	22	17.5	0.0067	$\chi 2$	7.3
Typical symptoms									
Cough/Breathlessness	57	18.2	16	8.6	41	32.5	<0.0001	$\chi 2$	27.5
Fever	43	13.7	13	7.0	30	23.8	<0.0001	$\chi 2$	16.7
Atypical symptoms									
Confusion/Altered behaviour	62	19.8	19	10.2	43	34.1	<0.0001	$\chi 2$	25.7
Anorexia	44	14.1	10	5.3	34	27.0	<0.0001	$\chi 2$	27.4
Diarrhoea/Vomiting	4	1.3	2	1.1	2	1.6	1.0	$\chi 2$	0.0

Regardless of other symptoms, a resident with **new onset anorexia** was almost four-times more likely to have SARS-CoV-2 infection than an individual who did not (OR 3.74, 95% CI 1.5–9.8). T

Aging Medicine

Open Acces

ORIGINAL ARTICLE | Open Access

Atypical presentations of COVID-19 in care home residents presenting to secondary care: A UK single centre study

Mark James Rawle, Deborah Lee Bertfield, Simon Edward Brill

First published: 17 September 2020 | https://doi.org/10.1002/agm2.12126

- less likely to experience cough (46.9% vs 72.9%, *P* = .002)
- more likely to present with delirium (51.6% vs 31.4%, *P* = .018), particularly hypoactive delirium (40.6% vs 24.3%, *P* = .043).
- anorexia (OR 3.20, 95% CI 1.21, 10.09, *P* = .028).

Brief Report | Published: 06 October 2020

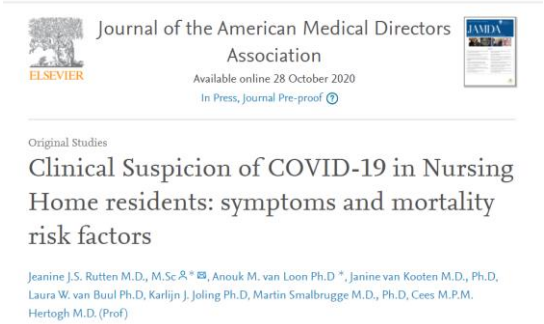
Atypical clinical presentation of COVID-19 infection in residents of a long-term care facility

Hubert Blain ✉, Yves Rolland, Athanase Benetos, Nadia Giacosa, Mylène Albrand, Stéphanie Miot & Jean Bousquet

European Geriatric Medicine (2020) | Cite this article

- Thirty-eight of the 79 residents (48.1%) tested positive for SARS-CoV-2.
- Respiratory symptoms were preceded by diarrhea (26.3%), a fall (18.4%), fluctuating temperature with hypothermia (34.2%) and delirium in one resident.
- Respiratory symptoms, including cough and oxygen desaturation, appeared after those initial symptoms or as the first sign in 36.8% and 52.2%, respectively.
- At any time of the disease, fever was observed in 65.8%.

- Among the 41 residents negative for SARS-CoV-2, symptoms included cough (21.9%), diarrhea (7.3%), fever (21.9%), hypothermia (9.7%), and transient hypoxemia (9.8%).
- No deaths were observed in this group.



Journal of the American Medical Directors Association
Available online 28 October 2020
In Press, Journal Pre-proof

Original Studies

Clinical Suspicion of COVID-19 in Nursing Home residents: symptoms and mortality risk factors

Jeanine J.S. Rutten M.D., M.Sc *, Anouk M. van Loon Ph.D *, Janine van Kooten M.D., Ph.D, Laura W. van Buul Ph.D, Karlijn J. Joling Ph.D, Martin Smalbrugge M.D., Ph.D, Cees M.P.M. Hertogh M.D. (Prof)

- 4007 clinically-suspected COVID-19 (N=4007),
- confirmed in 1538 residents (38%).
- C+ more likely in psychogeriatic ward and in residents with Dementia.

- COVID-19+ had one (42%) or two (35%) typical symptoms
  - comparable incidence in COVID-19 negative (29% and 10% 177 vs 27% and 13%)

- Fatigue (22%), diarrhea (18%), malaise (18%), rhinorrhea (12%), nausea/vomiting (12%), and common cold (12%)

- COVID-19+ were three times more likely to die within 30 days (hazard ratio (HR), 3·1; 95% CI, 2·7 to 3·6).
- higher mortality for residents with dementia, reduced kidney function, and Parkinson's Disease, even when corrected for age, gender, and comorbidities.

Final thoughts

- COVID 19 may be indistinguishable from other common acute illnesses
- High index of suspicion – low threshold for testing
- Atypical presentations not linked to lower mortality
- Important to maintain high standards of clinical assessment and appropriate investigations

Getting Ready….what's different now to March

Mary Burke
DON

Online webinar series hosted jointly by ONMSD and the National Integrated Care Programme Older Persons.
As part of COVID 19 Pandemic Response.

Getting Ready--------
What's different now to March 2020

Panic in March 2020

What we know now

- COVID-19 will have profound impact on the Nursing Home if it enters
- COVID-19 spreads rapidly
- There is a direct correlation between high incidence in the community and transmission in nursing homes
- Transfer of residents from hospital increases transmission
- Atypical clinical symptoms

March 2020

- Lack of knowledge and information regarding COVID-19 with evolving guidelines
- No access to PPE
- Delays in Testing
- Inadequate Contact Tracing
- No links with HSE/ Geriatricians
- No Serial Testing
- Inadequate Preparedness plans

First Steps

- Increase uptake of serial testing
- Weekly stock check of PPE
- Increased cleaning
- Continuous Education and training of all staff
- Regular contact with CHO lead
- Follow HPSC guidelines
- Review contingency plans

Governance and Management

- Identify an Infection Control Committee
- Ensure Infection control policy up to date
- Infection Control and Environmental audits
- Risk register updated regularly
- Resources available to purchase equipment
- Contingency plan in place for senior management unavailable for work
- Pilot contingency plans

Residents

- Nursing Homes have moved from social model to clinical overnight
- Ensure residents are consulted with and kept up to date with HPSC guidance
- Increase activity staff to ensure residents are not experiencing social isolation
- Set up pods for dining rooms and day rooms where possible
- Zoning of areas
- Twice daily check of temperature and monitor for signs of COVID-19
- For residents with a diagnosis of dementia have a plan if they require isolation

Residents

- Update care plans to include infection control and update end of life wishes
- Liaise with GP and family regarding transfers to acute hospital if COVID-19
- Vitamin D prescribed, flu vaccine given
- Access to anticipatory meds discussed with GP
- Maintain connections with family through window visits, phone-calls, video calls and facilitate compassionate visiting

Staff

- Clear communication strategy
- Education and training re COVID-19
- Roles and responsibilities outlined
- Serial testing
- Social distancing breaks, smoking areas
- Travelling in cars together
- Masks, hand hygiene, cough etiquette

Staff

- Psychological support
- Occupational Health support
- Risk assess where significant others work e.g other hospitals or meat factories
- Ensure the database of all staff is up to date
- Encourage flu vaccine

Relatives

- Ensure database of relatives is up to date
- Identify family dynamics
- Have a plan for contacting families
- Be careful sending texts/ emails etc.
- Prepare a media statement that may be required in event of outbreak
- Ensure connections with families and residents are maintained

Remember Pace Yourself

IPC Tips for Nursing Homes

Clodagh Keville
ADON/IPCN appointed CHO1

Online webinar series hosted jointly by ONMSD and the National Integrated Care Programme Older Persons.
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IPC tips for Nursing homes

Learning from our experiences to date

C Keville A/Don IPC CHO1

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

The basics do work !!

Do the basics consistently well –standard and transmission based precautions

- Hand Hygiene –Alcohol hand rubs, monitor glove use
- Social distancing-take a step back ,2m
- Use of PPE-Correctly /risk assessment – mask wearing
- Increase cleaning of frequently touched surfaces to at least twice daily

Reinforce key messages……

- Use of Guidance documents –HPSC ,HSE
- Reminders in workplace -Champions /Link practitioner /nurses (supports)
- Safety pauses throughout the day
- Symptom check and work exclusion policy
- Provide Education & Training –Hseland ,AMRIC webinars ,Q&A sessions ,HPSC ,CNME ,Use of UV light ,audits

Leadership

- Partnership approach –work together /non judgemental /supportive
- Management presence
- Contingency plan –widely communicated to staff-Live document
- Network and reach out –IPC ,Public Health palliative care team ,gerontologists ,other nursing home colleagues etc

Monitor

- Audits –simple–frequently
- Feedback and QIPs –take action
- Use of glow box -staff HH compliance
- Managers- lead by example

Person centred approach……

- Guidance very useful
- Look at the individual
- Risk assessment –balance of risk
- Compassionate approach
- Encourage visiting and maintaining family contacts
- communication with families –text system /phone calls

Your CHO1 IPC Safety Pause throughout your Working Day
Six Steps to Protect Yourself and Protect All Those Around You: Save Lives, Stay Strong!

1. 	**Clean your hands regularly: Hand Hygiene is protective, clean as you go!** ✓ Are you Hand Hygiene Ready right now?? ✓ Are you bare above your wrists/ bare below the elbow? ✓ Are you free of wrist jewellery & rings, bar one plain band? ✓ Are you free of nail gel/ polish? ✓ Are your nails clean and kept short? ✓ Don't carry your personal mobile phone with you while on duty.
2. 	**Cover your coughs & sneezes: Cough Hygiene & Respiratory Etiquette are protective, never cough or sneeze into your hand!** ✓ In healthcare if you are in the 2m zone, you must wear a surgical face mask ✓ If you are attending a healthcare appointment, you must wear a face covering ✓ Get into the habit of NOT touching your face mask/ covering. IF you do inadvertently touch your mask/ cover make sure you clean your hands immediately ✓ Get into the habit of not touching your face, eyes & nose. If you do, make sure you clean your hands immediately ✓ **Check your temperature twice daily if attached to services that need to do so- RCF staff & now all staff that visit client's homes.**
3. 	**As far as possible, stop touching your face, particularly if you have any respiratory symptoms. By doing so you help prevent the spread of infection!** ✓ Get into the habit of not touching your face, eyes & nose. If you do, make sure you clean your hands immediately ✓ Know the signs & symptoms of COVID-19 and make a mental check with yourself twice a day, that you have none of them! *(See the symptoms listed at the back of this page).*
4. 	**Clean as you go AND increase regular cleaning (and disinfection when indicated) to at least twice daily!** *(as far as is reasonably possible).* **Hygiene is protective, we have always said it!** ✓ all horizontal surfaces (table tops, seats of chairs, shelfs) ✓ the backs of chairs and other contact surfaces ✓ door handles and the area of the door around the door handles ✓ Taps, toilet seats, toilet flushes *etc* ✓ Make sure the daily cleaning is done thoroughly ✓ Remember shared transport vehicles too!
5. 	**We all need to stop shaking hands now! And avoid crowded spaces, we must be able to maintain a physical distance!** ✓ Stop shaking hands or hugging ✓ Limit face-to-face meetings/ educational sessions, preferably online; then limit to number that can comply with social distancing, room ventilation *etc*, and ✓ ***take another step back*** & respect each other's personal space.
6. 	**We all need to keep a 2m distance between us! A physical distance between us has always been protective, we need now more than ever!** **In clinical healthcare settings a minimum of 1m is now acceptable in terms of clinical and bed spaces** ✓ The social distance of 2m must apply in all others areas, **don't forget this includes kitchenettes, staff changing facilities and toilet facilities!**

Remember stay strong and ....

Lived Experience' – Covid Response Teams and Nursing Homes. Areas of learning to date. 'If I knew then what I know now'

Eileen Kelly
CRT Lead CHO 9

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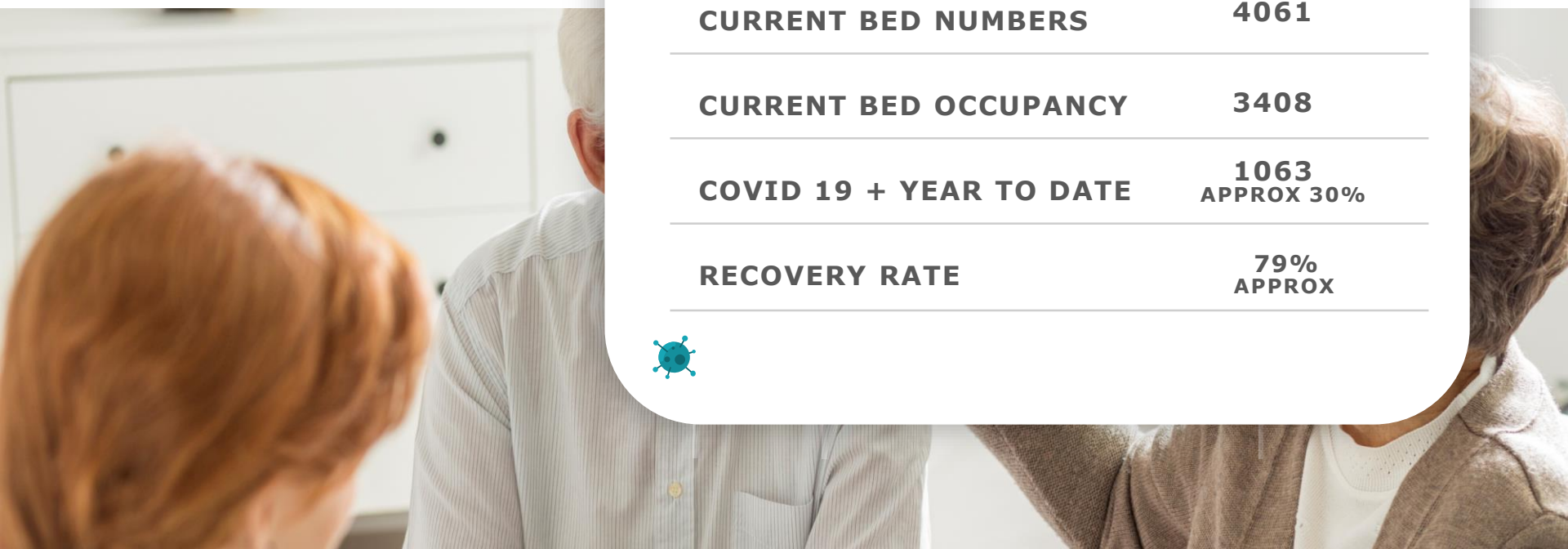
COVID-19

Crisis Response Team

What we have learnt in CHO 9 that we wish we had known in March

Context



52 NURSING HOMES

CURRENT BED NUMBERS	4061
CURRENT BED OCCUPANCY	3408
COVID 19 + YEAR TO DATE	1063 APPROX 30%
RECOVERY RATE	79% APPROX

Key Learning for us

01
COMMUNICATION

02
IPC/PPE

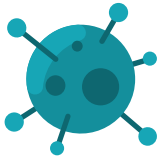
03
ONSITE KNOWLEDGE

04
Contingency Planning

05
Workforce Planning

06
Serial Testing

COMMUNICATION #01



- ✓ Develop pathways for support with all centres
- ✓ Daily contact & Daily reporting
- ✓ Daily communication with Public Health
- ✓ Onsite visits
- ✓ Weekly Web-Chat

- ✓ Weekly CRT Forum
- ✓ Weekly/fortnightly ACMT
- ✓ Fortnightly T-Con with Acute Hospitals
- ✓ Liaison with HIQA as required

IPC/PPE #02

	A	B	C	D	E	F	G	H	I
Frequency of Delivery	PPE not required for all categories	Hand Sanitiser	Gloves	Goggles	Face shield	Gown	Aprons	FFP2 Mask	Surgical Mask
Weekly		Not required	Required	Not required	Not required	Required	Required	Not required	Not required

- Responsive system for ordering
- Identified Storage Area
- Contingency Planning
- Provision for Donning & Doffing stations

ON SITE KNOWLEDGE #03

Know the geography of each site and any challenges that it may pose for it's staff

Onsite visits particularly during outbreaks

Be visible & available for staff

Be familiar with the managers and their deputies so that they are comfortable to ask questions and seek advice.

OUTBREAK

CONTINGENCY PLANNING #04

Where is your designated isolation area?

IS IT

Capable of being run independently - Suitable area for donning of PPE

HAS IT

Closed at either end with Fob/Key access only – Separate access for designated staff

Does your emergency policy include change of room for residents – discussion with families.

Work Force Planning #05

- Staff numbers and contingency for absenteeism
- Succession planning in the event of managers being absent
- Use of agency – planning ahead
- HSCP working across multiple sites
- Staff shared living arrangements

SERIAL TESTING #06

Molecular Tests (Nucleic Acid Detection)
Diagnose active SARS-CoV-2 infections

1. Obtain Specimen: Swab.
2. Extract RNA from specimen and convert to DNA.
3. Amplify by PCR with SARS-CoV-2 specific primers.
4. Interpret results: presence of viral RNA indicates active SARS-CoV-2 infection.

Regular Testing is Key

Timely results back to each Centre in addition to individual staff

CRT follow up on all positive results
- **With centre**
- **With public health**
- **Agree plan and support**

Questions?

STAY SAFE

Use the Q&A function to ask a question