



HA Report & Review on Elderly

10 July 2003

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Chronology Report

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- Early Phase – March 03
- Peak Phase – First 2 weeks of April
- Plateau Phase – 3rd & 4th weeks of April
- Resolution Phase – May
- Normalization Phase – end of May and afterwards

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Early Phase (Hospital)

- Decant a convalescent hospital to receive SARS convalescent patients
- 343 (53.4%) discharged home
- 287 (44.7%) transferred to 22 hospitals in different clusters

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Peak Phase (CGAT*)

- Reduce hospital attendances of elders (SOPCs, GDHs, enhanced community care)
- Prevent cross infection ('clean' team, PPE)
- Enhance infection control in OAHs (guidelines, practices, use of MDI + spacers)
- Triage support for homes with exposure (hotlines & prompt medical surveillance)
- Improve communication on infected elders (daily eSARS update)

* Community Geriatric Assessment Team

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Plateau Phase (DH, SWD)

Strengthen medical surveillance in collaboration with Visiting Health Teams (DH)

Transfer medically stable infirmed patients to welfare institutions:

CGATs to support medical care

155 patients transferred

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Resolution Phase (Private Public Partnership)

- VMO-CGAT collaboration
 - Reduce hospital admission of OAH residents
 - Honorarium for GP to visit homes for 2 hours/day
 - Manage episodic illnesses and triage fever cases
 - Back up by CGATs

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Normalization Phase (Plan)

- Review and upgrade infection control practices in OAHs (with DH)
- Analysis of profile and treatment of elderly with SARS (HA SARS Collaborative Data)
- Strategy in managing SARS in frail elders (with SWD/DH)
- Evaluate VMO-CGAT collaboration model
- Evaluate infirmary care in non-hospital setting

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Clinical Report

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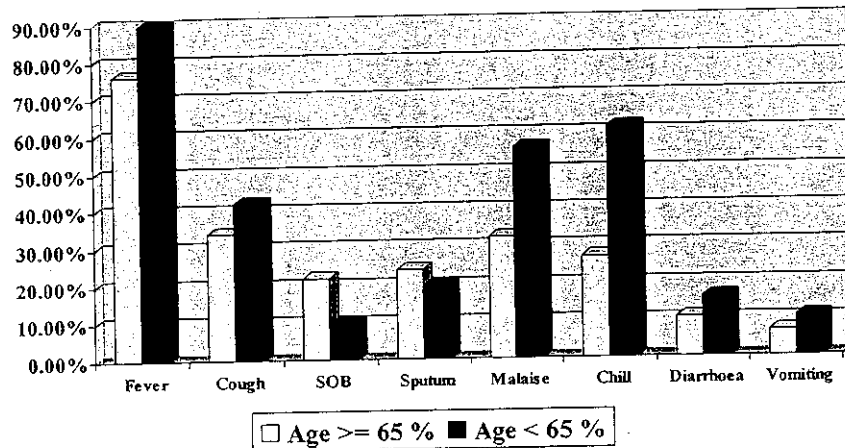
Study by the HA SARS Collaborative Group

Age group	M	F	All Sex
	%	%	%
65-74	22.4%	23.1%	45.5%
75-84	24.3%	10.8%	35.1%
85+	6.8%	12.6%	19.4%
Total	53.5%	46.5%	100%

Base: 325 SARS patients aged ≥ 65

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Symptoms on presentation of SARS by Age Group



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Symptoms on presentation

Symptom	Age \geq 65 %	Age < 65 %	Significance (p-value)
Fever	76.1%	89.6%	↓ < 0.0001
Cough	34.0%	42.1%	↓ 0.0385
SOB	21.8%	9.4%	↑ 0.0001
Sputum	23.9%	19.6%	0.1718 (NS)
Malaise	32.4%	56.4%	↓ < 0.0001
Chill	27.1%	61.7%	↓ < 0.0001
Diarrhoea	10.6%	16.1%	↓ 0.0313
Vomiting	6.9%	10.6%	0.0725 (NS)

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Atypical presentations in SARS elderly

Presenting Symptoms	Rate (%)
Falls on presentation	1
Delirium on presentation	3
Decrease Feeding on presentation	10
Decrease in General Condition on presentation	17

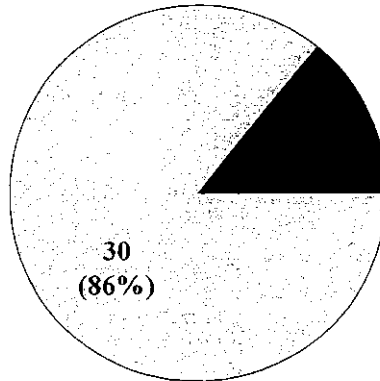
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Masked by Co-morbidity and Drugs

- Fever affected by drugs in patients with Ischaemic heart disease, Cerebral vascular accident, Gout
- Respiratory symptoms may be caused by co-morbidities (Chronic obstructive airway disease, Congestive heart failure)
- Chest X-ray confused by old pulmonary TB
- Lymphopenia associated with malnutrition

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Suppression of Fever response (effect of Aspirin /NSAID)



- Patients with maximum temp $\geq 38^{\circ}\text{C}$ in the first 5 days of admission
- Patients with maximum temp $< 38^{\circ}\text{C}$ in the first 5 days of admission

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Co-morbidity among Elderly

Co-morbidity	Rate (%)
Cerebral Vascular Accident	24
Ischaemic Heart Disease	20
Chronic Obstructive Airway Disease	18
Diabetes Mellitus	24
Cancer	7
Chronic Renal Disease	10
Chronic Liver Disease	2
None	38

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Co-morbidity and fever among Elderly

	Fever	No Fever	p-value
% with any co-morbidity	54.2	79.4	0.01*
% with COAD/ Asthma	11.0	32.4	0.003*
% with chronic renal failure	6.8	20.6	0.02*
% with IHD	16.1	35.3	0.01*

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>65 & Comorbidity among fatalities

	≥65	<65
With Co-Morbidity	39%	11%
Without Co-Morbidity	19%	31%

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Co-Morbidity Case Fatality Rate (50%)

- Chronic renal failure – 89%
- Cerebral vascular accident – 71%
- Ischaemic heart disease – 65%
- Chronic liver disease – 60%
- Diabetes mellitus – 50%
- Cancer – 49%
- Chronic obstructive airway disease / Asthma – 38%

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Age-stratified Case Fatality Rate

Age Group	CFR	Cum. Age	CFR
<24	0%	0-24	0%
25-34	2%	0-34	1%
35-44	10%	0-44	4%
45-54	13%	0-54	6%
55-64	25%	0-64	8%
65-74	47% (78%)	0-74	12%
>75	66% (84%)	0-100	17%

(CFR for those from Old Aged Homes)

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Prevention Strategies

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Patient Surveillance

- High index of suspicion
- Contact history from patients, carers, staff of residential homes
- Body Temperature taking & recording
- Other signs of infections / pneumonia
- Atypical presentations

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Hospital Surveillance

- Geriatrician support for triaging
- Rapid PCR results
- Surveillance of patients in wards
- Easy access to premorbid level of elderly patients
- Alert system in clustering of admission, Suspected / confirmed SARS

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Old Aged Homes Surveillance

- Temperature recording and fever registry
- Active enquiry on respiratory symptoms
- Records of visitors
- History of hospital admission and contacts with patients with SARS
- CGAT nurse monitor the infection control at residential homes
- VMO-CGAT collaboration

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Community Surveillance

- Standardized patient records & patient transfer note
- 100% compliance to bring LORCHE cards, patient transfer note in attending OPD, A&E and admission
- System alerts according to facilities, address, co-residents between departments
- Passive Surveillance in OAH by CGAT
- Active monitoring of admission of OAH residents
- Urgent Report network between HA / DH / SWD
- Enhance GOPC and GP clinics

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