

06-MAY-2004 16:14 FROM



醫院管理局

HOSPITAL
AUTHORITY

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專責委員會(2)文件編號 : H149

SC2 Paper No. : H149

BY FAX

群策群力為病人·優質醫護滿杏林

Quality Patient-Centred Care Through Teamwork

6 May 2004

Clerk to Select Committee
Legislative Council
HKSAR

(Attn: Miss Flora TAI)

Fax: 2248 2011

Dear Miss TAI,

TPH SARS IC Audit Report

As requested, I attach the Tai Po Hospital SARS Infection Control Audit Report.

Yours sincerely,

(Dr TUNG Sau-ying)
Hospital Chief Executive
Tai Po Hospital

Encl.

SYT/ws

**New Territories East Cluster
Tai Po Hospital
SARS Infection Control Audit Report**

1. **Aim:** To assess staff compliance of infection control against SARS in TPH

2. **Date of audit:** 30.4.2003

3. **Methodology:**

- (a) Instrument – Audit checklist modified from NTEC
- (b) Target areas being audited
 - Dept of Psychiatric: 1A, 2AR, 2BR, 2C wards
 - Dept of Medicine & Geriatric: 1DL, 3AL, 3BR, 3DR, 3DL wards
 - Dept of Orthopaedic Rehabilitation: 3CL ward

4. **SARS Prevention Audit Team Members:**

Ms Helena LI, GM (N), TPH

Ms Amy CHAN, WM (NDH)

Ms Alice WONG, Lecturer, IANS

Ms Imelda LEUNG, NO (RM & PRD, NTEC)

Ms Sunny SUN, NO (DOR, TPH)

Ms Shirley MOK, NO (CND, TPH)

5. Audit Results – Non SARS clinical areas

(A) Environment, equipment and consumables

Items	Source of information	Compliance	Remarks
Environment			
• Ventilation – adequate and suitable	Observe	100%	
• Air outlet – clean regularly and in good condition	Observe & ask	90%	1. Frequency: unknown
• Air filter – change regularly	Ask	90%	2. Dusty air outlet in one ward
• Wall suction – clean	Observe	100%	
• Floor: clean and dry	Observe	100%	
• Specimen - In & out trays: adequate distance apart (at least 3 feet apart)	Observe	70%	Specimen out-tray is too close to document in-out trays
Supply of PPE and consumables			
• N95 masks	Observe	100%	
• Surgical masks	Observe	100%	
• Gloves	Observe	100%	
• Disposable gown	Observe	100%	
• Alcohol hand rub	Observe	100%	N/A in five wards
• Alcohol wipe	Observe	90%	1. N/A in one ward; 2. Shortage of supply in one ward; 3. To use alcohol wipe only without running water for hand-washing in one ward
• Red waste bag	Observe	80%	Inadequate supply of large red bags

5. Personal Protective Equipment (PPE)			
• N95 masks – adequate	Ask in-charge	100%	
• Surgical masks – adequate	Ask in-charge	100%	
• Gloves – adequate	Ask in-charge	100%	
• Disposable gown – adequate	Ask in-charge	100%	
• Alcohol hand rub – adequate	Ask in-charge	60%	No supply in four wards
• Alcohol wipe – adequate	Ask in-charge	80%	No supply in two wards
• Goggles / visors – adequate	Ask in-charge	100%	
• Red waste bag – adequate	Ask in-charge	100%	Inadequate supply of large red bags
6. Storage of PPE			
• N95 masks – proper storage	Observe	80%	1. New N95 masks were kept in sluice room 2. Improper storage of reused N95 mask
• Surgical masks – proper storage	Observe	100%	
• Gloves – proper storage	Observe	100%	
• Disposable gown – proper storage	Observe	100%	
• Alcohol hand rub – proper storage	Observe	50%	No supply in five wards
• Alcohol wipe – proper storage	Observe	90%	No supply in one ward
• Goggles / visors – proper storage	Observe	100%	
• Red waste bag – proper storage	Observe	100%	
7. Disinfection			
• Hypochlorite solution 1000ppm is used for disinfection.	Ask supporting staff	80%	Two domestic staff did not know the dilution of hypochlorite solution
• Thorough cleansing of all clinical areas is performed at least three times per day.	Ask supporting staff	70%	1. No routine cleansing of patients' and staff's chairs 2. No plastic cover and routine cleansing of Karaoke microphone for patients.

Items	Source of information	Compliance	Remarks
• Temperature of bedpan washer is 80-85°C.	Observe	90%	1. Out of order in one ward 2. Staff worried about the steam coming out bedpan washer
• No nebulizer / BIPAP / CPAP is being used for suspected / confirmed SARS patients.	Observe	100%	
• Clean and dirty items are kept far apart (at least 3 feet apart).	Observe	50%	Both clean and dirty items were put in sluice room and dirty utility room
• Patients' toilet – Cleanliness	Observe	90%	The flushing system was out of order in one ward
• Staff's toilet – proper infection control measures	Observe	100%	

(B) Ward practice

Items	Source of information	Compliance	Remarks
B.1 Placement of suspected or probable SARS patients			
• In single isolation room / patient cohort	Ask	100%	
B.2 PPEs			
• putting on barrier protective apparel	Observe	100%	
• removing barrier protective apparel	Observe	100%	N/A in five wards
B.3 Medical staff barrier protective apparel			
• Gloves	Observe *staff	100%	Four medical staff were observed: 1. Two of them did not change PPEs before entering into the wards 2. One of them did not cover the back and the hair completely with PPEs.
• Gowns	Observe *staff	75%	
• N95 mask	Observe *staff	100%	
• +/- Goggles / visors	Observe *staff	100%	

B-4. Nursing Staff, Barrier Protective Apparel			
• Gloves	Observe *staff	100%	
• Gowns	Observe *staff	100%	
• N95 mask	Observe *staff	100%	
• +/- Goggles / visors	Observe *staff	100%	
B-5. Allied Health Staff, Barrier Protective Apparel			
• Gloves	Observe *staff	100%	Only one allied health staff was observed
• Gowns	Observe *staff	100%	
• N95 mask	Observe *staff	100%	
• +/- Goggles / visors	Observe *staff	100%	
B-6. Supporting Staff, Barrier Protective Apparel			
• Gloves	Observe *staff	100%	
• Gowns	Observe *staff	90%	One supporting staff did not cover the back completely with gown.
• N95 mask	Observe *staff	90%	One supporting staff's N95 mask slipped down
• +/- Goggles / visors	Observe *staff	100%	
B-7. Handwashing			
• Handwashing technique	Observe	100%	
• Paper hand towels are used to turn off water tap after Handwashing	Observe	100%	

Items	Survey Method	Compliance	Remarks
• Clinical wastes are handled properly.	Observe	100%	
• Excreta are handled properly: Urinal(s)	Observe	80%	1. Not applicable in five wards because patients were either female or male on diaper 2. A full urinal was observed hanging on the bedside rail
• Excreta are handled properly: Bedpan(s)	Observe	100%	Not applicable in three wards because patients were either ambulatory or on diaper
	Observe	70%	
• Linens are handled properly: Soiled linen	Observe	70%	1. Clean linen was put on dirty linen trolley 2. Clean linen was put in sluice room and dirty utility room
• Medical records are kept in trolley(s).	Observe	100%	
• Specimens are handled properly.	Observe	100%	
• No eating or drinking in inpatient area.	Observe	90%	A tea-room was located opposite to cohort area.
• No touching of eye, nose & mouth with gloved hand	Observe	100%	
• No manipulation of mask by gloved hand(s).	Observe	100%	

(C) Patient Care Handling

Items	Survey Method	Compliance	Remarks
• Feeding – proper infection control measure	Ask	100%	
• Taking temperature - proper infection control measure	Ask	100%	
• Chest physiotherapy - proper infection control measure	Observe / Ask	N/A	
• Suctioning - proper infection control measure	Observe & Ask	100%	
• Administration of drug(s) - proper infection control measure	Observe & Ask	100%	
• Transferring of patient – proper infection control measure	Observe	90%	Serco staff without gown-up transferred patients into the wards
• Garden parole – proper infection control measure	Observe / Ask	N/A	

(D) Record keeping

Items	Source of information	Compliance	Remarks
• Updated record of staff training on Infection Control is kept.	Check record	100%	Recorded in Staff Rostering System
• Updated record of sick leave.	Check record	100%	

(E) Patient / Visitor Compliance

Items	Source of information	Compliance	Remarks
• Patients: Barrier Protective Apparel: surgical mask	Observe *patient	80%	Some patients were not cooperate in putting on masks
• Visitors : Barrier Protective Apparel : surgical mask	Observe *visitor	N/A	
• No direct contact with case notes / X ray films.	Observe *patient	100%	

6. Common observed problems and Recommendations

Common observed problems	Recommendations
1. Environment, equipment and consumables <ul style="list-style-type: none"> - Air flow : most of auditees did not know the direction of air flow inside clinical areas - Wall suction : not wrap / cover with plastic bag when not in use 	<ul style="list-style-type: none"> - Ward staff should know the air flow in ward so that they have better bed arrangement of patients with respiratory infectious disease - Advised to cover the unused suction bottles / tubings when not in use
2. Setting of PPEs at the entrance of ward <ul style="list-style-type: none"> - No alcohol hand rub was available because of no supply from pharmacy 	<ul style="list-style-type: none"> - Supply of alcohol hand rub to all wards from Pharmacy to all wards
3. Stock of long red waste bags <ul style="list-style-type: none"> - Insufficient large red waste bags were supplied 	<ul style="list-style-type: none"> - Assess the adequate amount of large red waste bags and make requisition accordingly
4. Dilution of disinfectant <ul style="list-style-type: none"> - No accurate measurement of hypo 6 (Domestic staff) 	<ul style="list-style-type: none"> - Close monitoring of domestic staff is advised
5. Handwashing <ul style="list-style-type: none"> - Staff turned off water tap without paper hand towel 	<ul style="list-style-type: none"> - Close monitoring of the compliance by ward ICO frequently
6. Handling of clean and soiled linens <ul style="list-style-type: none"> - clean linens were stored in sluice room - clean & soiled linens were put in the same linen trolley 	<ul style="list-style-type: none"> - Ward ICO should reinforce the concept of clean and dirty zone in ward area. - Put away all clean linens from sluice room - Separate clean from soiled linens

Common observed problems	Recommendations
<p>7. Putting on PPEs</p> <ul style="list-style-type: none"> - 2 SARS team Medical Staff put on PPEs in and out of the ward - Some staff's back were not covered by disposable gown 	<ul style="list-style-type: none"> - Reinforce the infection control measures - Advise to establish a buddy system to check the staff putting on PPE - Advise to install a long mirror in the gowning area
<p>8. Others :</p> <p>8.1 Disposable gown : staff in 4 audited wards putting on double gowns (blue & white coloured gowns)</p> <p>8.2 Latex gloves : some domestic staff put on double latex gloves</p> <p>8.3 Knowledge of infection control measures :</p> <ul style="list-style-type: none"> - a domestic staff mixed up the sequence of removal of PPEs - some domestic staff who collected the rubbish bags & clinical wastes put on the same set of PPEs in & out from one ward to another <p>8.4 Staff rotation: domestic staff were rotated frequently (reflected by ward i/c). Hence the newly deployed staff was not familiar with infection control practice in ward. It caused additional workload of nurses to provide training to them</p> <p>8.5 Mat for shoes : some wards used bed sheets soaked with hypo 6 as the floor mat for shoes cleansing while in & out the ward.</p> <p>8.6 Ward hygiene most of the wards did not have schedule of routine cleansing of chairs, bedside rails, rims of bed</p> <p>8.7 Staff hygiene</p> <ul style="list-style-type: none"> - some staff put on non-essential ornaments such as bracelet - most of the staff wore wrist watch <p>8.8 Collection of wastes & dirty linens</p> <ul style="list-style-type: none"> - domestic staff need to go inside individual ward to collect the wastes and dirty linens. The collected wastes / linens would be traveled from ward to ward 	<ul style="list-style-type: none"> - Advise to follow NTEC Infection Control Guidelines - Advise to follow NTEC Infection Control Policy - Advise to monitor the domestic staff's compliance on infection control measures by their supervisors - Domestic staff's rotation should be minimized. - There is no evidence to indicate that the hypo 6 mat is useful for infection control. It is advised to stop the existing practice promptly - Advise to set up routine cleansing schedule - Advise to minimize the non-essential ornaments - Advise not to put on wrist watch. Check the timing from the clock - Advise domestic staff of individual ward to transport the waste and dirty linen to ward entrance and transfer that to the collector