

Guidelines for Dental Practice and Maxillofacial Surgery in COVID-19 Pandemic

CHS/KNH WEBINAR

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Dr. Walter A. Odhiambo BDS, MDS(OMFS), FRIS.

Consultant Maxillofacial Surgeon and Chairman Department of Oral and Maxillofacial Surgery

University of Nairobi

Outline

- COVID-19, current statistics
- Transmission
- Guidelines and Category of emergencies
- Remote consultation, Triage and Risk assessment
- Emergency Care Centers
- Safety and Personal Protection during care
- Emergencies seen at KNH during the COVID-19 pandemic

COVID- 19, Current Global Facts and Statistics

COVID-19 is caused by Severe acute respiratory syndrome coronavirus 2, (SARS-CoV-2)

December, 2019 first case reported in Wuhan China

13th March, 2019 Kenya reported first case

Global Statistics as of 22nd April,2020

2,587,819 infected Dead 180,000 Recovered 706,006 (210 countries/territories)

Kenya 303 cases 14 deaths Recovered 83

www.worldometers.info, www.health.go.ke

Transmission

Highly infectious and contagious

Droplets from the upper aero-digestive tract of infected persons

Actively through *cough* and *sneezing, speaking*

Passively contaminated hands or other materials getting into contact with mouth eyes and nose (MEN)

Inhalation of ***aerosols*** floating in the contaminated air.

Oropharynx

Naso-pharynx



Transmission of Covid-19

Health Workers at the Anatomical Epicenter

At the risk of getting infected or spreading the infection (nosocomial) +
Family

- Dental Surgeons
- Maxillofacial Surgeons
- ENT surgeons
- Anaesthesiologists
- In close contact with the patients,
- direct contact with the droplets
- Aerosols in the environment and generated during procedures
- Contaminated surfaces

Wuhan Experience

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A Brief Introduction to the Staff and Student Confirmed with COVID-19 in School and Hospital of Stomatology, Wuhan University.

No. ^a	Occupation	Department	Workplace	No. of Persons on Same Floor or Dept	Are There Any Close Contacts Infected?	Date of Initial Symptom
	Doctor	Preventive dentistry	Bldg 1	10	No	Jan 23
	Nurse	Prosthodontics	Bldg 1	51	No	Jan 28
	Nurse	Prosthodontics	Bldg 1	51	Family members ^b	Feb 4
	Administrator	Library	Bldg 1	2	1 family member	Jan 27
	Nurse	Oncology surgery	Bldg 2	37	Family members	Jan 31
	Administrator	Teaching office	Bldg 2	18	Family members ^b	Jan 29
	MD student	Research group ^c	Bldg 3	19	1 family member	Jan 28
	Doctor	Zhongshang clinic ^d	Satellite clinic	18	1 family member	Jan 29
	Doctor	Yichang clinic ^d	Satellite clinic	15	1 family member	Jan 29

^a COVID-19, coronavirus disease 2019.

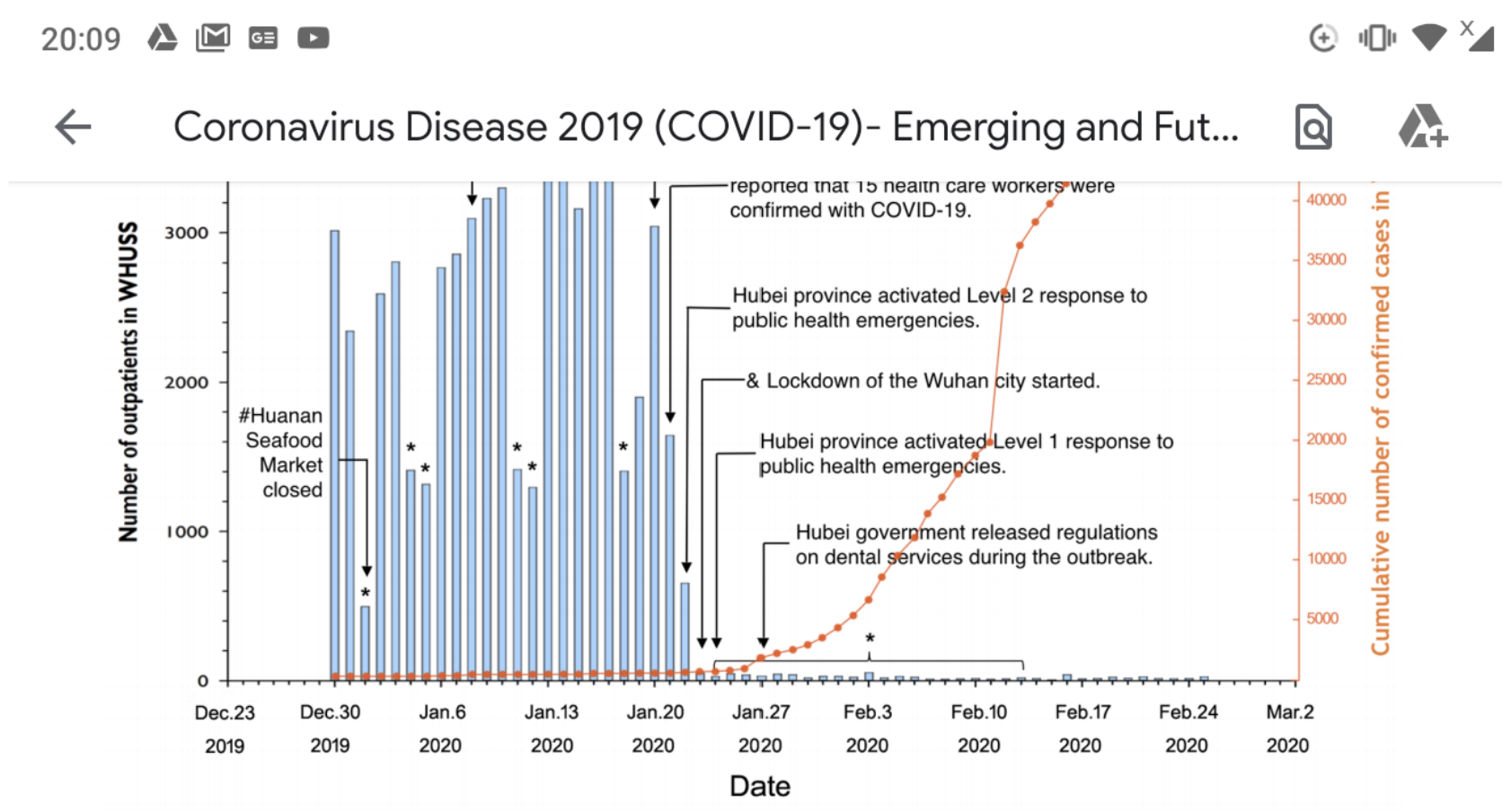
^b Staff and the student confirmed with COVID-19 did not contact one another closely, and most of them had been away since January 22 or 23, because of the Chinese Spring Festival.

^c Member with COVID-19–related symptom at least 1 d earlier.

^d Bldg 7 is a research group member supervised by a professor. No classmates or roommates of his were reported to be infected.

^e Zhongshang clinic and Yichang clinic are 2 of 16 satellite clinics of our hospital. The former, located within Wuhan city, is 4 km away from the

THE Wuhan Experience



Transmission to HCWs

Indonesia 5136 confirmed cases 469 deaths

24 medical professionals 6 of whom were dentists

25% of the Medical Professional fatalities

Not all were on the frontline. Advised dentist and ENT to close save for emergencies.

China, India, Canada, Italy, US, UK- National Associations advised closure of PP

Indonesia Dental Association did not advise closure of the dental clinics

Kenya Dental Association advised closures in the second week of the first case reported. Recommended suspension of elective procedures.

- Indonesia medical association - Dental tribune 16/4/2020

KDA/ MOH Definition of Emergencies during COVID-19 Pandemic

Emergencies are conditions that require immediate dental attention (life threatening) while urgent cases are severe or uncontrolled symptoms that cannot be managed by the patient (or are likely to progress to emergency) and require the patient to be seen by a dentist or dental specialist in a designated facility.

Emergencies (KDA/MOH)

1. Uncontrolled Bleeding in the mouth and oro-facial region.
2. Cellulitis and soft tissue infections intra-orally or extra orally that can potentially compromise the airway.
3. Trauma involving facial bones that potentially compromises the airway.
4. Dental pain not amenable to pharmacotherapy.
5. Dental trauma resulting in avulsion of anterior permanent dentition.
6. Cancer patients and patients with compromised immune systems in need of urgent care.

NHS (England) Urgent Dental Care - UDC

- Life threatening emergencies due to potential airway compromise
- Trauma... dentoalveolar injuries and avulsion of permanent teeth
- Rapidly progressing oro-facial swelling
- Persistent haemorrhage
- Dental conditions that have led to severe systemic illness
- Severe pain non-responsive to remotely prescribed measures
- Fractured teeth with pulpal exposures
- Severe infections
- Suspected malignancies
- Oro-dental conditions that worsen systemic disease

NHS COVID-19 guidance and standard operating procedure, urgent dental care systems in the context coronavirus, 15th April 2020

Urgent Dental Care

- UDC can be delivered as
 - primary care or
 - secondary care for COVID- 19 patient in hospital
- **Healthcare professionals should use their clinical judgement , considering this as challenging and rapidly changing environment**

Staff Safety

- Staff stay at home or work remotely
- Stop provision of all routine non-emergency/urgent procedures (NIH has stopped non-urgent dental care including orthodontics) just as recommended by KDA and AOMSK.
- The public should be made aware through messages of lack of routine services and what to do in case of emergency
- Remote consultation and triage; **A**dvice, **A**nalgesia and **A**ntimicrobial **AAA**

Remote Consultation and Triage

- Telephone/ video
- Risk assessment questions - AAA if feasible
- Referral when absolutely necessary to **designated emergency care center for face to face consultation**
- Patients at risk to be advised on community safety protocols including mode of travel
- **Face to Face** consultation center PPE, avoid aerosol generating procedures AGP unless absolutely necessary
- **Perform non-AGP.**
- **Appropriate distancing-** physical and temporal measures; zones and spaced appointments

Risk Assessment

Risk assessment questions (RAQs)

- New continuous cough,
- Temp $>37.8^{\circ}\text{C}$,
- Household with cough or temp,
- You or family tested +ve for covid-19
- Under isolation? Contact or likely with covid-19 +
- Shielded patients – those at risk of severe illness from covid-19 (>60 yrs, Underlying medical condition – HPT, DM)
- Minimise patient escorts, if necessary only one and from the same household
- PPE decontamination and waste

Emergency care centers

- Trained and skilled/ experienced staff
- Convenient allocation – minimal travel distances
- Opening hours adequate for staggered appointments (physical and temporal spacing)
- Masks, hand washing at entrance, sanitizers
- Short procedures
- Non- AGP preferably and AGP when absolutely necessary
- Appropriate PPE - Non-AGP – level 2ppe
AGP – level 3 ppe (coverall/Hazmat suits)
- Setting with adequate space and ventilation
- Indemnity for procedures carried out during Covid-19 pandemic??

Care Center

- 2 meters separation in reception rooms possibly with labels
 - Remove all non- essential items from waiting area
 - Clean and well aerated
 - Standard infection control precautions (SICPs)
 - Transmission based precautions TBP
 - Contact precautions
 - Droplet precautions –control transmission over short distances via droplets >5micrometers from patient to mucosal surface or conjunctiva
- Droplet transmission risk is a perimeter of 1meter

Care Center and PPE

- Airborne transmission – transmission via aerosols <5micrometers from the respiratory tract of the patient directly to mucosal surface or conjunctiva without necessarily being on close contact
- THEREFORE PRECAUTIONS INCLUDE; Contact, droplet and aerosol precautions
 - hand hygiene,
 - respiratory cough hygiene- disposable tissues
 - Training in donning and doffing PPE

Safety Measures for Health Care Workers

- Training on donning and doffing PPE. (Videos can be used)
- Know what PPE to wear for each setting and context
- Access to the PPE that protects them for the appropriate setting and context
- Gloves and aprons are subject to single use as per SICPs with disposal after each patient or resident contact
- Fluid repellent surgical mask and eye protection can be used for a session of work rather than a single patient or resident contact
- Gowns or coveralls can be worn for a session of work in higher risk areas
- Hand hygiene should period be practiced and extended to exposed forearms, after removing any element of PPE
- staff should take regular breaks and rests

N95 mask or N95 Respirator



FFP3 (Filtering face piece)

- Fit tested on the staff to ensure adequate seal
- Fit checked every time donned
- Compatible with eye/facial protection used

Staff Safety - PPE



Personal Protection Equipment

All patients present a risk of COVID- 19 transmission – Asymptomatic carriers and community transmission

- Non-AGP

Aim to prevent contact or droplet transmission; eye protection, disposable fluid resistant surgical mask, disposable apron and gloves

Avoid intra-oral radiographs (Use OPG / CBCT)

- AGPs

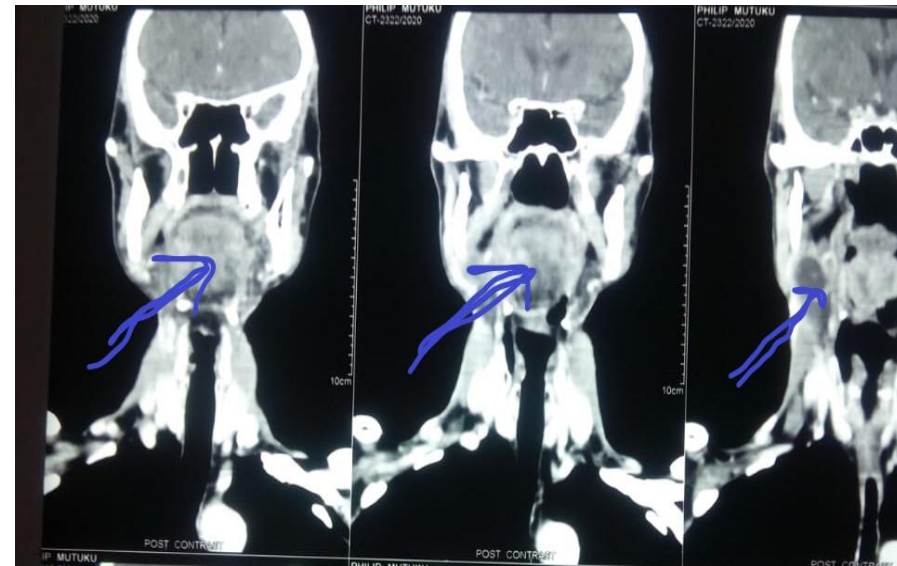
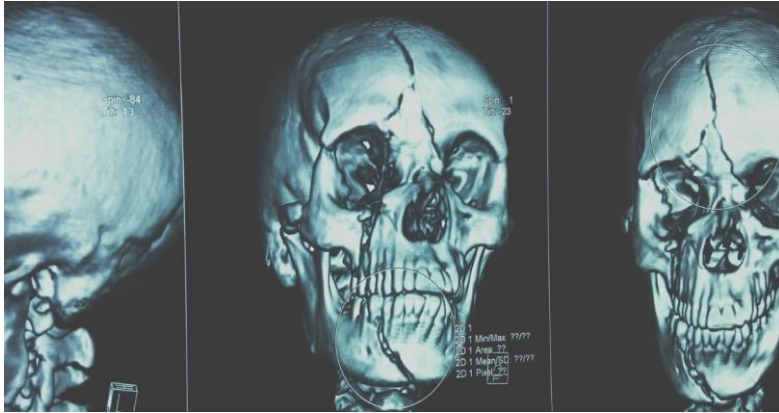
prevent aerosol transmission; disposable fluid repellent surgical gown or long sleeve water proof protective apron, gloves, eye protection and FFP3 (filtering face piece) respirator

- High speed suction and rubber dam

AGPs in Dentistry and Maxillofacial Surgery

- Hand pieces and ultrasonic scalers
- High speed drills in restorative procedures
- Surgical high speed drills and saws
- Removing bone should use slow speed with irrigation
- 3-in-1 syringes
- other compressor powered equipment are regarded as high risk for aerosol transmission

Maxillofacial Surgery Emergency Cases at KNH during COVID-19 Pandemic



Courtesy of Dr. Bati & MDS (OMFS)