

Oral and Clinical Manifestation Experience Among Covid-19 Patients in Kampung Nelayan, Padang, Indonesia

Abu Bakar^{1*}, Valendriyani Ningrum²

¹Department of Oral Medicine, Baiturrahmah University, Padang, Indonesia

²Department of Dental Public Health, Baiturrahmah University, Padang, Indonesia

*Corresponding author: abuba.mmed@gmail.com

ABSTRACT

The coronavirus disease 2019 (COVID-19) had rapidly spread across the globe. In Indonesia, above four million people were infected by COVID-19 by 134 thousand people were died caused by the disease. This study was aimed to explore the clinical and the oral manifestation of COVID-19. This study was employed by a qualitative study using in-depth interviews. 12 COVID-19 patients who were quarantined in Kampung Nelayan, Padang were recruited, interviewed and recorded related to the symptoms which they had experienced. The subjects of the study were experienced several clinical and oral symptoms such as fever, headache, dry cough, difficulty breathing, canker sore/oral ulcer, loss of taste, loss of smell (mostly the bad smell), dry mouth and toothache. They suggested to the government to optimize the tracing, testing, and treatment of the disease, to provide a worthy quarantine place and to schedule the general doctors in the district quarantine area.

Keywords: COVID-19, Oral Manifestation, Clinical Manifestation, Loss of Taste

1. INTRODUCTION

The coronavirus disease 2019 (COVID-19) virus, began in December 2019 in Wuhan, China and several patients with pneumonia had been connected to the Huanan animal market [1]. The virus has increased quickly worldwide. WHO has declared the description of the condition of the disease as a pandemic (WHO 2020). As of March 31, 2020, 200 countries from all regions (Asia, Africa, America, Europe, and Oceania) have confirmed their citizens being infected by the virus. It was also reported 253 million people have been infected with the disease and 5.1 million people died.

Clinical appearances of the illness are fever, cough, sneezing, myalgia, headache, diarrhea, less common symptoms were sputum production, dyspnea, leukopenia and lymphopenia at the onset of illness [2,3,4,5]. The clinical types are divided into three categories: mild, severe and critical type. The symptom of mild type is non-pneumonia or mild pneumonia. Patients with severe type were detected as dyspnea, respiratory frequency $\geq 30/\text{min}$, blood oxygen saturation $\leq 93\%$, partial pressure of arterial oxygen to fraction of inspired oxygen ratio < 300 , and/or lung infiltrates $> 50\%$ within 24/48 hours. A critical type of COVID-19 is suffering symptoms such as respiratory failure, septic shock, and/or multiple organ dysfunction or failure [6,7].

Some patients had companion diseases including diabetes, hypertension, and cardiovascular disease [2,3,4,8]. Oral manifestations of COVID-19 patients were ulcer, erosion, bulla, vesicle, pustule, fissured or depapillated tongue, macule, papule, plaque, pigmentation, halitosis, whitish areas, hemorrhagic crust, necrosis, petechiae, swelling, erythema, and spontaneous bleeding with the suspected diagnosis such as aphthous stomatitis, herpetiform lesions, candidiasis, vasculitis, Kawasaki-like, erythema multiformis-like, mucositis, drug eruption, necrotizing periodontal disease, angina bullosa-like, angular cheilitis, atypical sweet syndrome, and Melkersson-Rosenthal syndrome. The most common sites of involvement in descending order were tongue, labial mucosa, palate, gingiva, buccal mucosa, oropharynx, and tonsil [9]

To the best of our knowledge, the study discussed the oral manifestation and clinical manifestation of COVID-19 in Indonesia was limited. Therefore, the aims of the study are to explore clinical conditions, oral manifestation, self medications and recommendations of COVID-19 patients in Kampung Nelayan, Padang, Indonesia.

2. METHODS

This qualitative study was led in October 2020. The participants were chosen by convenience and snowball sampling techniques. The participatory observation and in-depth interviews were organized for the participants in Kampung Nelayan, Padang City.

In-depth interviews were conducted with a total of 15 participants. Each of the in-depth interviews was moderated by one of the investigators. Each in-depth interview took around 45–50 min. The interview was guided using a set of questions to keep the participants focused on the purpose of the study. Participants were stimulated to add any supplementary information if required.

After the completion of the audio-recorded interview, the subjects of the recorded files were transcribed verbatim in English and all the personally identifiable information was hidden by the investigators. Inductive thematic analysis was used to analyze the data. In the first step, researchers read through the text line by line to get familiarized with the data and to generate initial codes. These codes were then sorted into the potential themes and subthemes, and this step was conducted by two researchers independently, to ensure reliability. Data trustworthiness included credibility, transferability, dependability and confirmability. By conducting data triangulation (In depth interview, participatory observation, and multiple coders for recorded interview), purposive sampling, and earlier study replication.

3. RESULTS

Sixteen individuals participated in the study and 60 patients in Kampung Nelayan were observed. These participants involved college students, working individuals and housewives. The common themes generated in In-depth interviews were changes in general medical condition, oral manifestation, self-medication, psychological complaints and recommendations. The details of themes and subthemes are tabulated in Table 1. The observation confirmed the results of the in-depth interview.

Table 1. Themes and Subthemes of the interview

Themes	Subthemes
General Health Condition*	Sneezing, headache, muscle pain, diarrhea, cough, fever, shortness of breath while sleeping, lost of smell
Oral Manifestations	Multiple aphthous stomatitis, gingival hyperplasia, lost of taste, change of taste, oral malodor
Medications	Antipyretic, antibiotic, zinc, vitamin, oral mouthwash, herbal medication such as ginger, date, and honey, nasal spray, and eucalyptus oil application on nasal Cavity
Psychological complains	Stereotypical view from the neighbors, pressures from primary health care representatives
Recommendations	Regularly activity in district quarantine place (i.e. gym), entertainments (i.e TV), regularly medical visit, separating the positive COVID-19 patients and first negative swab tested, education to restrict the negative community view

The in depth-interview showed that the patients being infected by COVID-19 after close contact with their families, neighbours, co-workers and some of them did not know the source of transmission. The inert points were (1) forget to wash the hands after touching the public facilities; (2) opening the masks while eating together with the co-workers; (3) do not regularly keep physical distancing with the confirmed positive COVID-19 of families and neighbours and (4) some healthcare professionals and administrators did not use the correct personal protective equipment in the interaction with the patients.

4. DISCUSSIONS

The findings corroborate previous findings that explained the oral symptoms of Covid-19 were aphthous stomatitis, herpetic lesions, candidiasis, hyperplastic lesions [9]. We also reported the inert points of COVID-19 transmissions such as the possibilities of contaminants of inert surface [10] and the healthcare settings only provide the personal protective equipment for the professionals or other workers who served the COVID-19 patients. Developing the district/area quarantine must consider some regular activities such as sport, entertainment and a medical visit to reduce the psychological stress of the patients.

A previous study reported that most of the drugs used for self-medication in the treatment and prevention of COVID-19 were vitamin C and multivitamin and antimalarial drugs like hydroxychloroquine and chloroquine antibiotic such as amoxicillin, ciprofloxacin, herbal products, metronidazole, and Erythromycin [11]. In line with this study that the patients in Kampung Nelayan choose some self-medication, they were antipyretic such as paracetamol, antibiotics like amoxicillin and ciprofloxacin, zinc, multivitamin, oral mouthwash, herbal medication such as ginger, date, and honey, nasal spray, and eucalyptus oil application on the nasal cavity.

The presence of oral manifestations of COVID-19 suggests that doctors and dentists manage oral complaints. The prevention of COVID-19 patients in the pubic area was effective however it was difficult for the government to control the transmission in family and workplace settings. And the government should develop COVID-19 district quarantine to prevent the COVID-19 transmissions through the management in the quarantine place should be improved

AUTHORS' CONTRIBUTIONS

AB collected the data, AB and VN sorted the transcribed interview into themes and sub-themes, AB wrote the manuscript and VN reviewed the manuscript.

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