

COVID19
DEATH AUDIT REPORT
July 2020



Department of Health & Family Welfare
Government of Kerala

This report gives the information regarding the deaths studied by the State Death Audit Committee.

In the next volume more analytical aspects shall be covered and complete document shall be published.

COVID-19 Death Audit Report of July (Audited on: 7th August 2020)

1. Overview

The State Death Audit Committee met via Google meet on 7th August 2020 for auditing COVID 19 deaths till July 31st. The team audited 63 COVID- 19 related deaths. Two deaths were from the month of June 2020 and is also considered in the analysis.

All 63 COVID related deaths considered for audit on date were lab confirmed cases. In 52 cases it was agreed that the underlying cause of death was COVID-19. In 4 cases decision is kept pending for post mortem findings as the cases were brought dead to the hospitals. Seven cases were Non- COVID deaths as the cause of death was ascertained to be terminal illness as Malignancy -3, Acute Myocardial Infarction -3 and Suicide -1. One COVID death was not included for analysis as the deceased was a native of Tamil Nadu state. Total number of COVID-19 deaths considered for analysis was 51 (2 deaths of June and 49 of July).

Deaths which occurred in patients with prolonged hospital stay or recurrent / multiple hospital admissions were opined to be indicative of hospital acquired infection.

Co-morbidities were found to be a major threat and most of them had multiple co-morbidities.

2. Methodology

The methodology adopted for identifying the underlying cause of death was as per the following:

Definition of COVID-19 death

A COVID-19 death is defined for surveillance purposes as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be

related to COVID-19 disease (e.g. trauma). There should be no period of complete recovery between the illness and death.

Definitions based on International Statistical Classification of Diseases (ICD)

- An emergency ICD-10 code of 'U07.1 COVID-19, virus identified' is assigned to a disease diagnosis of COVID-19 confirmed by laboratory testing.
- An emergency ICD-10 code of 'U07.2 COVID-19, virus not identified' is assigned to a clinical or epidemiological diagnosis of COVID-19 where laboratory confirmation is inconclusive or not available.
- Both U07.1 and U07.2 may be used for mortality coding as cause of death.

In ICD-11, the code for the confirmed diagnosis of COVID-19 is RA01.0 and the code for the clinical diagnosis (suspected or probable) of COVID-19 is RA01.1.

Reference

- 1) World Health Organization. COVID-19 Coding in ICD-10. <https://www.who.int/classifications/icd/COVID-19-coding-icd10.pdf>

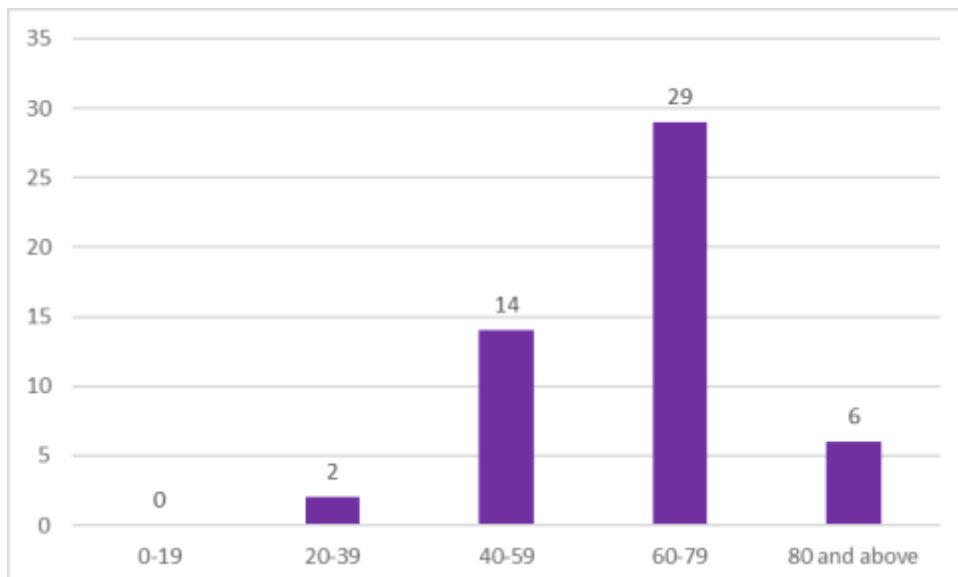
3. Summary of COVID-19 related deaths audited on 07.08.20

1	Total deaths where the underlying cause of death was identified as COVID-19: (COVID-19 Deaths)	51
2	Total deaths where the underlying cause of death is not COVID-19*	7
3	Total deaths where Post mortem reports are pending and remains unclassified at the moment	4
4	Total COVID-19 deaths of Non- Kerala Natives*	1
5	Total COVID-related deaths audited for July 2020 (07.08.20)	63

*Annexure-1

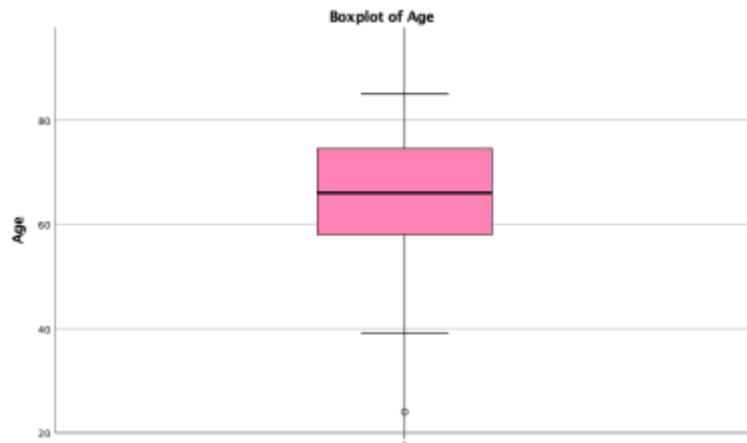
The results of the analysis of 51 COVID-19 deaths audited is given below.

4. Age distribution of the COVID-19 deaths



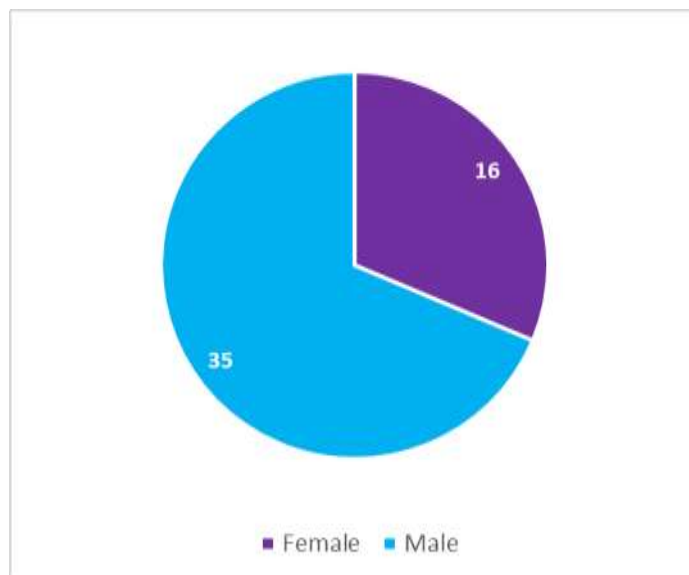
Maximum number of deaths in the age group 60-79 followed by 40-59 age group.

The mean age of the patients who had died were 64.8 years with a standard deviation of 13.2. The minimum age among the deceased was 28 and maximum was 85 years



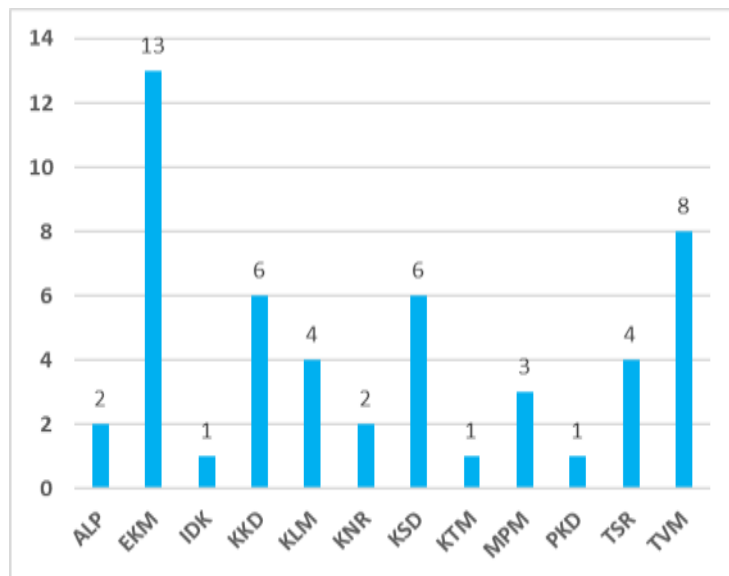
There were no deaths in the age group below 20 years. Age appears to be an important factor in mortality.

5. Gender Distribution of COVID-19 deaths



More deaths were observed among the males.

6. District wise distribution of COVID-19 deaths



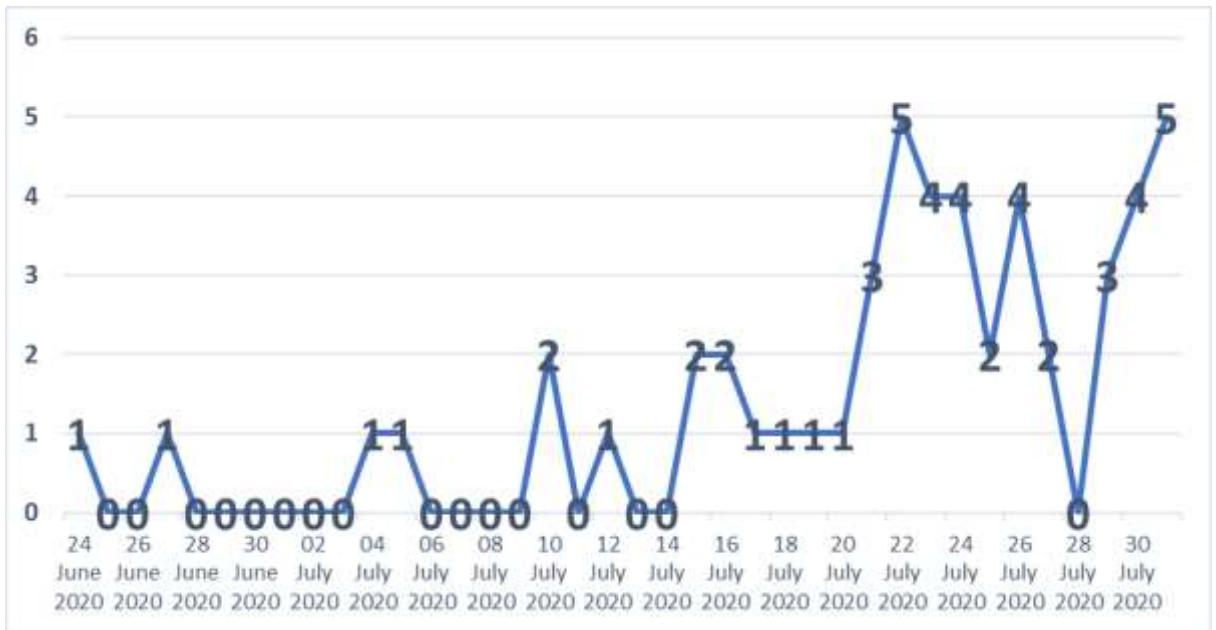
Ernakulam district recorded the maximum number of deaths followed by Thiruvananthapuram district

7. Travel history among the COVID-19 Deaths



More deaths were observed among those without travel history.

8. Trend of COVID-19 deaths



The trend of deaths was on the increase after mid of July.

9. Distribution of major comorbidities among the COVID-19 Deaths.

Comorbidity	Number (% out of 51)
No comorbidity	3 (6%)
Hypertension	33 (65%)
Diabetes	35 (69%)
Cancer	6 (12%)

The major comorbidities of the COVID-19 deaths were Hypertension and Diabetes.

There were six cancer patients who had died due to COVID-19.

Three persons who had died did not have any comorbidities.

Annexure-1

Details of deaths where the underlying cause of death is not COVID-19 and those excluded from Kerala COVID death list.

Sl: No.	District	Name of the deceased	Age	Gender	Date of Arrival	Date of Result	Date of death	Comorbidity-Cause of Death	Underlying cause of death COVID / NON-COVID	REMARKS
1	TVM	SDAC7/8 / 20-2	45	M			26-Jun-20	CA STOMACH with metastasis	NON-COVID DEATH	
2	KKD	SDAC7/8 / 20-4	68	M		01-Jul-20	27-Jun-20	HTN, CAD	NON-COVID DEATH	SUICIDE
3	ALP	SDAC7/8 / 20-12	47	M	02-Jul-20	14-Jul-20	12-Jul-20	CA STOMACH	NON-COVID DEATH	
4	KNR	SDAC7/8 / 20-14	64	F		30-Jul-20	12-Jul-20	Ca Colon with Lung Metastasis	NON-COVID DEATH	
5	IDK	SDAC7/8 / 20-15	59	F		15-Jul-20	12-Jul-20	CAD	NON-COVID DEATH	ACUTE MI
6	KSD	SDAC7/8 / 20-37	68	M		20-Jul-20	23-Jul-20	DM, CKD, CLD, PHTN	NON-COVID DEATH	ACUTE MI
7	MPM	SDAC7/8 /20-45	71	M		19-Jul-20	26-Jul-20	HTN, DM	NON-COVID DEATH	ACUTE MI

8	TN	SDAC7/8 / 20-38	65	M			23- Jul- 20	-	COVI D DEATH	Native of Tamil Nadu came for treatme nt (not added to the Kerala List)
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