

Module: Introduction to Research (BMHP5005) Assessment 2: Viva Voce

Cardiovascular disease prevention during the COVID-19 pandemic

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Introduction

This literature review is about prevention and support people living with cardiovascular disease during COVID-19 isolation. It founded on three articles on the subsequent topics:

- 1) Outcomes of Covid 19 acute coronary syndrome(ACS) patients.
- 2) Chest pain presentations to hospital during the COVID-19 lockdown: Lessons for public health media campaigns.
- 3) Monitoring indirect impact of COVID-19 pandemic on services for cardiovascular diseases in the UK.

- **Aim:** is to connecting the proof for management healthcare for people living with cardiovascular disease and their support during COVID-19 isolation.
- **Objectives:** to observe of hospitals to reveal the diagnosis and therapy of CVD during pandemic period and notify about collateral impacts.

Methods

Analytical cohort study, Retrospective serial cross-sectional study, semi-structured telephone interviews

Keywords: Cardiovascular disease, Covid-19, isolation, lockdown, impact, mortality, England, UK

Databases: PubMed,

Language: English

Type of source: Academic general articles

Geography/Location: England

Exclusion criteria: CVD in adults

Inclusion criteria: primary research

Literature Review

Aim of study	Methods and Sample size and characteristics	Summary of main findings
The aim of study to explore mortality in patients admitted to hospital with COVID-19 and patients with Covid and ACS, and define the contrast in their treatment (Rashid, M. 2021)	Key words: Coronavirus disease 2019 (COVID-19), Acute coronary syndrome (ACS), mortality. Pandemic, England Analytical cohort study From 1March 2020 to 31 May 2020 Using data from all acute NHS Hospital in England Patients >18 years of age	12 958 patients with ACS were admitted at hospital during the study period. 517 (4%) were Covid-19 disease. Patients with Covid-19 and ACS were older, Black Asian and Minority ethnicity. The hospitalization rate in patients with Covid-19, ACS were higher than in patients without Covid-19. 4%patients were positive with Covid 19 infection and admitted to hospital with ACS in England and is associated with lessen rates of recommended therapy and notable danger.

Literature Review

Aim of study	Methods and Sample size and characteristics	Summary of main findings
To explore how Covid-19 pandemic and public health advice has impacted seeking help with chest pain	Key words: chest pain, Covid-19, emergency service, cardiovascular disease, cardiology. 28 semi-structured telephone interviews April and May 2020 Participants were female 54% Aged between 39-88 years 7 patients under the care of cardiologist 14 patients chest pain with myocardial infarction 7 participants with chest pain	Seeking help during pandemic: (Access to physical check-up was restricted. Phone consultations were insufficient. Concerns about the impact of virus on health: (Day-to-day reports about the newly infected and deaths, building of new hospitals contributed to people's fear of going to the hospital. Hospital experience: (Participants described positive visit to hospitals Experience) (Ferry, A.V. 2021)

Literature Review

Aim of study	Methods and Sample size and characteristics	Summary of main findings
To develop a national surveillance protocol for hospital CVD services during Covid-19 To develop a tool to monitor hospital services for CVD in the UK	Key words: United Kingdom, Covid-19, cardiovascular disease, impact, hospital services. Retrospective serial cross-sectional study 9 UK Hospitals, From 28/10/2019 (pre-Covid-19) To 10/05/2020 (lockdown), and For the same weeks during 2018-2019	Total hospital entrances reduced after lockdown by 57.9% 52.9 % - previous year Activity cardiovascular conditions declined by 31-88% after lockdown

(Ball,S. 2020)



Results

- Patients with concomitant cardiovascular disease and coronavirus disease (COVID-19) are more likely to have complications and death.
- In all hospitals, call for help fell sharply during the lockdown. The study showed that hospitals across the UK could provide data for accurate time monitoring of general and CVD activities.
- The media campaigns during the pandemic did not find a balance between the covid emergency and the behaviours to be avoided, creating confusion in patients

Discussion

The review showed that UK hospitals could provide real-time data on CVD-specific activity during the pandemic, and this trend improved as restrictions eased.

Currently, there is no coordination for the management of all this information, but we understand the importance of working on this to manage emergencies, as was the covid.

Recommendations:

The pandemic highlighted the need to monitor hospital activities and develop

strategies to ensure cardiovascular and total assistance during the emergency.

Limitations:

- In this first phase of data collection requested from hospitals in the United Kingdom, the information was general, obtaining a good result.
- With more detailed data and a comparison with previous years' data, better procedures can be obtained in case of future emergencies.

Conclusion

- With the experience of monitoring during the covid, we understand that the real-time sharing of data and information between hospitals is crucial for a better response to health emergencies.
- It is necessary to involve strategies for efficient and just care for patients with cardiovascular disease during the pandemic. Miss opportunities to identify and order risk factors for CVD during the pandemic lead to an increase in the number of patients with CVD in the future and, in the long term, to the rise in the diagnosis of dementia associated with heart disease.
- Future media campaigns should inform the population about the emergency of the moment without neglecting the importance of public health.

References

- Ball, S. *et al.* (2020) 'Monitoring indirect impact of COVID-19 pandemic on services for cardiovascular diseases in the UK', *Heart (British Cardiac Society)*, 106(24), pp. 1890–1897. doi:10.1136/heartjnl-2020-317870
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- RASHID, M., WU, J., TIMMIS, A., CURZEN, N., CLARKE, S., ZAMAN, A., NOLAN, J., SHOAIB, A., MOHAMED, M.O., DE BELDER, M., A., DEANFIELD, J., GALE, C.P. and MAMAS, M.A., 2021. Outcomes of COVID-19 Positive Acute Coronary Syndrome Patients; a multisource Electronic Healthcare Records Study from England. *Journal of internal medicine*