

Academic Posters Video Lesson

Title is bold font 72 (font range can be 72-120pt)

Subtitle is font 48 (font range can be 48-80pt) (Author's name)

Section header is 36pt (font range: 36-72pt)

Standard poster body text is 24pt. As a general rule a poster should have between 500-600 words - less is always more. The poster should be separated into 3 or 4 columns with subtitles and sections.


Slide design

The poster should read from top left to bottom right. Consider using a light colour background and a dark text or a dark background and a light text. The colours you see on your computer monitor will not reproduce exactly the same so expect a colour shift of 2-3 shades [1].

Font type

Try to use a suitable font type. The most common types are 'Arial', 'Calibri', or 'Times New Roman'. Other fonts include Arial Black, Franklin Gothic Heavy, Tahoma, Trebuchet, Verdana, Garamond, Book Antiqua, or Bookman Old Style, just to name a few [1].

Text alignment

All text should be clearly organised and formatted correctly. Try to use 'justify text'  This will align the text squarely and help the poster look professional.

Shapes and text box



Use shapes to create your sections.



Use shape fill to create your colours.



Use text box to create your content. This means you can move your content around easily and create clear borders between the shape, sections and the text.

Suggested font sizes by section

Title: 72-120 pt.

Subtitle: 48-80 pt.

Section headers: 36-72 pt.

Body text: 24-48 pt.

Figure captions: 18 pt [2].

Graphs, charts and images

Illustrations such as graphs, charts, and images can help explain complex information or data while providing visual breaks between text, keeping readers engaged.

- Find ways to demonstrate your research visually: use charts or graphs to explain complex information.
- If using images from the internet, search websites containing royalty free images that display a Creative Commons license.
- Don't use too many images (think **60% text, 40% graphics** as a guideline) [3].
- Only use images relevant to the poster content. Don't use images to make the poster 'look nice'. Everything must be connected to content.
- All images must be referred to in the body text. Use language like:

Figure 1 shows UK GDP growth from 1990 to 2015 which indicates... or UK GDP growth from 1990 to 2015 (Figure 1) indicates...



Figure 1: GDP Growth Percentage [4].

- Always label the image with its title and source.
- Use words to label the image like 'Figure' or 'Table'.
- Look at the example above (Figure 1: GDP Growth...+ source).
- Use a smaller font of 18pt.
- Include a citation with the figure e.g. [4].
- Always provide the image's source and include the source in the reference list.

Citations

This depends on your department (check reference system!). All facts or ideas used that are not your own must be referenced in the body text clearly and include a reference list at the end of the poster. This poster is using Vancouver referencing (a numbered referencing style).

Checklist

- Can you read the title from several feet away?
- Did you include all relevant sections?
- Are all the body text sections in alignment?
- Have you used the same font and sizes throughout the poster?
- Does each image, figure, or table have a label?
- Have you referenced all the ideas taken from other sources?
- Is the reference list in the correct format?
- Are authors listed? With contact information?
- Did you save your poster as a PDF? [3]

Printing

Your final poster will need to be printed on a large-format printer; this service can be provided by the print department who are equipped to print in excess of size A0. Printing is not done directly from a PPT file. You need to export the poster to PDF format, ensuring you maintain the high resolution for your images [5].

References / useful reference sources

1. AUCD. PowerPoint poster presentation tip sheet - association of university. [cited 2023 Jul 23]. Available from: <https://www.aucd.org/docs/PowerPoint%20Poster%20Presentation%20Tip%20Sheet.pdf>
2. University of York. Posters with a powerful point: A practical guide to designing academic posters [Internet]. [cited 2023 Jul 23]. Available from: <https://subjectguides.york.ac.uk/posters>
3. UCLA. Research guides: Poster presentations [Internet]. [cited 2023 Jul 23]. Available from: <https://guides.library.ucla.edu/c.php?g=223540&p=1480858>
4. ONS. Yearly UK Economy Gross Domestic Product. [cited 2023 Jul 23]. Available from: <https://www.ons.gov.uk/economy/grossdomesticproductgdp>
5. TRUL. Creating an academic poster: Research Guides at Thompson Rivers University Library. [cited 2023 Jul 23]. Available from: <https://libguides.tru.ca/academicposters>

Academic Posters Video Lesson

Cardiovascular Disease

Coronary artery bypass graft surgery (CBAG)

Background

Cardiovascular disease (CVD), a term used for any disease which affects the heart or blood vessels, is responsible for almost a third of all deaths worldwide. Of this group, coronary heart disease (CHD), known simply as heart disease, is the most common cause of premature death (BHF, 2022). Despite the UK death rate due to CVD having declined by more than 75% since 1960, of the 1.5m men and 800,000 women currently living with it, one in eight males and one in fifteen females will die.

Objectives

- To define Cardiovascular Disease (CVD).
- To explain the symptoms, causes, surgical treatment and prevention.
- To conclude that health education is the key.

The symptoms of heart disease

Heart disease occurs when the flow of oxygen-rich blood reaching the heart is reduced due to a combination of fat or cholesterol causing a build-up of atheroma. As the arteries become narrower, this can lead to angina, or if the arteries are clogged, known as atherosclerosis this can trigger a myocardial infarction, or heart attack, and even heart failure. Those with heart failure are twice as likely to suffer from cerebrovascular disease, such as a stroke. Those who have been diagnosed with atrial fibrillation, a rapid and irregular heartbeat, the likelihood of suffering from a stroke is even higher, at five times more likely, due to the formation of blood clots. If the disruption of the blood supply to the brain is only temporary, this is known as a transient ischaemic attack, or 'mini stroke', whereas if the symptoms last longer, this results in the loss of brain cells, and over a prolonged period of time, leads to vascular dementia.

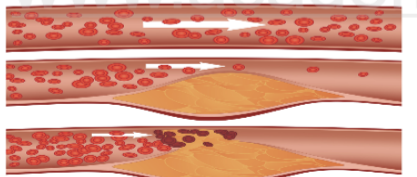


Figure 1: Cholesterol plaque (atherosclerosis) (BHF, 2022)

Causes

Two of the biggest causes of heart disease are high blood pressure and high cholesterol. The BHF (2022) argue that high blood pressure can put pressure on the heart and blood vessels, and thus increase the chance of a heart attack, while Public Health England (2019) claim that 50% of all strokes are caused by hypertension. With regard to cholesterol, a lipid produced by the liver and found in the bloodstream, raised levels of low-density lipoprotein (LDL) cholesterol can cause a build-up of fatty deposits and in turn, clog blood vessels, and lead to heart disease (NIDDK, 2021). Both hypertension and LDL are generally caused by a poor diet. The NHS (2020) state that consuming too much salt will lead to hypertension, and saturated fats will encourage LDL to surge.

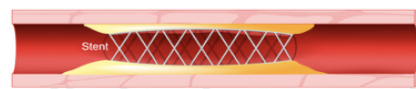
Treatment

The main CHD treatment procedure is Coronary Artery Bypass Graft surgery (CABG), usually referred to as open heart surgery. This involves a single, double, triple or quadruple bypass depending on the number of arteries affected. Bypass surgery takes blood vessels from the internal mammary artery in the chest and either the radial artery in the arm or saphenous vein in the leg and attaches these above and below the blocked coronary artery (see Figure 2). These new blood vessels (grafts), ensure blood flow is rerouted around the blockage (Whitlock, 2021).



Figure 2: Cholesterol plaque (atherosclerosis) (BHF, 2022)

A less invasive alternative to a CABG is coronary angioplasty, whereby a balloon attached to a catheter inserted into a blood vessel in the arm or groin is then inflated to widen the artery and a stent keeps the artery open (Figure 3).



Conclusion

Although a CABG has enabled people living with CHD to have a much more prolonged life than fifty years ago, there is growing concern that the longevity is decreasing. According to Whitlock (2021), during eight to ten years after having a CABG, the prognosis changes to a 60-80% increase in mortality. The key recommendation is more awareness and educational programmes are needed regarding the importance of healthier lifestyles, then perhaps the 17m global deaths due to CVD will begin to decline again.



Figure 4: Lipid-lowering therapy: statins (NIDDK, 2021)

Prevention

As a poor diet is the founding cause for high blood pressure, high cholesterol and diabetes, a low-sugar, high-fiber diet is recommended consisting of unsaturated fats to raise high-density lipoprotein (HDL) cholesterol, a limit of 6g of salt per day, and plenty of fruit and vegetables in conjunction with regular physical activity, such as 150 minutes of moderately intensive exercise or 75 minutes of vigorous exercise (NHS, 2020). Although lipid-lowering statins (see figure 4) are also effective to treat conditions of angina or blood clots, experts maintain that diet and lifestyle changes have the biggest impact (NIDDK, 2021).

References

1. Public Health England, (2019). *Health matters: preventing cardiovascular disease* [online]. Available at: <https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease/health-matters-preventing-cardiovascular-disease> [Viewed 20.07.2023].
2. National Health Service (NHS), (2020). *Prevention – Coronary heart disease* [online]. Available at: <https://www.nhs.uk/conditions/coronary-heart-disease/prevention/> [Viewed 24.07.2023].
3. National Heart, Lung and Blood Institute (NHLBI), (2018). *Know the Differences: Cardiovascular Disease, Heart Disease, Coronary Heart Disease* [pdf]. Available at: https://www.nhlbi.nih.gov/sites/default/files/media/docs/Fact_Sheet_Know_Diff_Design_508.pdf [Viewed 20.07.2023].
4. Whitlock, J., (2021). *Overview of Double Bypass Heart Surgery* [online]. Available at: <https://www.verywellhealth.com/what-is-a-double-bypass-heart-surgery-3157247> [Viewed 21.07.2023].
5. National Institute of Diabetes, Digestive and Kidney Diseases (NIDDK), (2021). *Diabetes, Heart Disease, & Stroke* [online]. Available at: <https://www.niddk.nih.gov/health-information/diabetes/overview/preventing-problems/heart-disease-stroke> [Viewed 25.07.2023].