Warwick Think Tank

An examination of the socio-economic inequalities impeding effective female cancer care

02

POLICY

HEALTHCARE

AN EXAMINATION OF THE SOCIO-ECONOMIC INEQUALITIES IMPEDING EFFECTIVE FEMALE CANCER CARE

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The Cross:

Located in the historic town of Kenilworth in the heart of Warwickshire, The Cross is an award-winning pub that combines Michelin-starred food with a welcoming, relaxed atmosphere. Under the guidance of chef-owner Andreas Antona and head chef Adam Bennett, they have held a Michelin star for over six years and are proud to boast three AA Rosettes. They received a Good Food Award Gold Seal in 2021. The Cross is housed in a Grade II listed 19th-century inn and has been sympathetically restored to retain its heritage alongside contemporary touches that make it a fabulous place to enjoy great food, a casual atmosphere, and informal but attentive service. During the pandemic, Andreas launched a nationwide meal delivery service, inspired by dishes served at The Cross and its sister restaurant Simpsons in Edgbaston. He is now building on its success with the launch of Soko Patisserie, producing ethical, artisan chocolate and Antona Bespoke catering services.

The Cross at Kenilworth is recruiting kitchen and front-of-house staff to join its fantastic team. They have various positions available, offering four days a week with a good rate of pay and pension. Please send your CV and covering letter to enquiries@thecrosskenilworth.co.uk

BRIEFING NOTE

OVERVIEW

Our aim is to give an overview of the current gaps in the health sector with regards to female cancer care. Due to the changes in the global healthcare systems, in particular due to the pandemic, there are major delays and flaws in the plan that was made in line with the long term plan that the NHS created in 2019, for example. Similarly, on a much larger level, the plans made by WHO are outdated as the predictions were from the perspective of progression before the pandemic. Therefore, one of the main areas that we look at is the way that COVID-19 has impacted the progression of female cancer care.

Although COVID-19 has revealed insufficiencies in the healthcare sector for female cancer care in particular, on a more individual level, biases and prejudices within the healthcare system that have been imbibed through misinformation in education et al., prove to be barriers to effective female cancer care, thus exacerbating inequalities. This includes the efficiency in diagnosis for patients, the personalised care that the patients receive and how this impacts the overall care of the patients.

We look at the different factors that have impacted cancer care overtime and the need of understanding these overlooked areas in more detail to show what a massive impact it is having in general. For example, we have the socio-economic background of the individual, the race or ethnicity of the individual, the gender identity of the individual and age all have an impact in the cancer care provided to individuals.

HOW BARRIERS WITHIN THE HEALTH SYSTEM IMPEDE FEMALE CANCER CARE

Screening is one of the most important ways to diagnose patients in order for the right care to be given to the patient

- Screening and the timely treatment of any detected disease are vital for effective care.
- Almost half of patients are diagnosed at a late stage in England, and almost 4 in 10 of all cancer cases were diagnosed through an urgent suspected cancer referral.[1]
- Breast screening uptake has fallen slightly in England in recent years.[2]
- Cervical screening rates have similarly declined for a variety of reasons; 34% of women did not attend their last cervical smear test.[3]

Women lack personalised support

- Whilst most women in the UK report high levels of satisfaction with their treatment programmes, there is widespread concern about a lack of communication and more holistic support.
- 70% of survey respondents reported either not receiving, or not being aware of, their care plans.[4]
- Similarly, patients reported that other support mechanisms, such as providing information to close relatives, and support from health or social services or their GP practices, were lacking (Scottish Government, 2019).
- More than half of patients reported that the 3rd sector (charitable organisations) failed to provide them with useful information or support after their treatment (Scottish Government, 2019).

[1] Ncin.org.uk. (2013). Survival by stage. Available at: http://www.ncin.org.uk/publications/survival_by_stage [Accessed 3 Dec. 2021].
[2] Cancer Research UK. (2015). Cancer Statistics for the UK. Available at: https://www.cancerresearchuk.org/health-professional/cancer-statistics-for-the-uk#heading-Four [Accessed 3 Dec. 2021].
[3] Improving the health and wellbeing of girls and women. (2019). Available at: https://www.rcog.org.uk/globalassets/documents/news/campaigns-and-opinions/better-for-women/better-for-women-full-report.pdf.
[4] Scottish Government (2019). Scottish Cancer Patient Experience Survey 2018 National Results. Available at: Scottish Cancer Patient Experience Survey 2018 - National Results (www.gov.scot) [Accessed 4 Dec. 2021].

Psychological and perceived barriers curtail access to cancer care

- Women feel that access to basic female health services is poor.[5] This has a knock-on effect on cancer outcomes, as women struggle to receive the information and the screening services they require.
- A considerable proportion of women feel unable to seek care due to feelings of embarrassment, either with regards to their body image (24% of respondents) or their condition (24% of respondents).[6]
- The decline in cervical cancer screening is partly due to a sense of embarrassment, with 21% of surveyed women reporting this as being a reason for their lack of attendance, also due to a fear of pain, cited as a reason by 16% of women (Improving the health and wellbeing of girls and women, 2019).
- There is also a divide along ethnic lines: South Asians reported the highest emotional barriers, such as lacking confidence to talk to doctors.[7]

[5] Department of Health and Social Care Women's Health Strategy: Call for evidence About the College. (2021).Available at: https://www.rcog.org.uk/globalassets/documents/news/2021-06-rcog-department-of-health-and-social-care-womens-health-strategy---call-for-evidence.pdf [Accessed 3 Dec. 2021].
[6] Improving the health and wellbeing of girls and women. (2019). Available at: https://www.rcog.org.uk/globalassets/documents/news/campaigns-and-opinions/better-for-women/better-for-women-full-report.pdf.
[7] Niksic, M., Rachet, B., Warburton, F.G. and Forbes, L.J.L. (2016). Ethnic differences in cancer symptom awareness and barriers to seeking medical help in England. British Journal of Cancer, 115(1), pp.136–144.

THE EFFECTS OF COVID-19 ON CARE FOR SPECIFIC FEMALE CANCERS

There is delay in early detection of Breast cancer screening due to COVID-19

- Reports from The University of Edinburgh[8] show that the pandemic diverted personnel and resources away from cancer screening, diagnosis, and treatment activities, reducing the chances of early detection, creating further fatalities.
- Figueroa et al suggest that for breast cancer, early detection and treatment is key to improve survival and longer-term quality of life[9], however; due to the health services generally being strained in many ways, the pause on breast mammography screening has had a huge effect on early diagnosis.
- Gathani et al[10] come up with a similar conclusion- the quicker the diagnosis and treatment the better survival rate. Their research shows that the government's management of COVID-19 has led to poor outcomes and shortened survival for those needing treatment for cancer.
- The CWT data shows that there was a much larger fall in non-urgent referrals for assessment of breast cancer symptoms. Therefore, a reduction in this type of referral type will translate to a less significant reduction in the overall number of cancer diagnosed.

There is a massive backlog in diagnosis and treatment of cervical cancer due to COVID-19

- The current disruption associated with the pandemic threatens to derail WHO's global strategy to accelerate the elimination of cervical cancer as a public health problem.[11]
- The disruptions are expected to result in an excess of advanced cancer diagnoses and deaths in the coming years[12].
- Due to the fact that 6.5 in every 100 people are receiving the COVID-19 vaccine, the disruptions in the healthcare networks spanning from the primary, secondary and tertiary care needed for cancer screening programmes require guidance on recovery strategies for resuming routine cervical cancer screening.[13]

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[8] The University of Edinburgh. (2021). The impact of the COVID-19 pandemic on breast cancer early detection and screening. Available at: https://www.ed.ac.uk/cancer-centre/news-and-events/latest-news/covid-and-breast-cancer-screening [Accessed 3 Dec. 2021].
[9] Figueroa, J.D., Gray, E., Pashayan, N., Deandrea, S., Karch, A., Vale, D.B., Elder, K., Procopio, P., van Ravesteyn, N.T., Mutabi, M., Canfell, K. and Nickson, C. (2021). The impact of the COVID-19 pandemic on breast cancer early detection and screening. Preventive Medicine, 151, p.106585. Available at: https://www.sciencedirect.com/science/article/pii/S0091743521001699 [Accessed 3 Dec. 2021].
[10] Gathani, T., Clayton, G., MacInnes, E. and Horgan, K. (2020). The COVID-19 pandemic and impact on breast cancer diagnoses: what happened in England in the first half of 2020. British Journal of Cancer, 124(4), pp.710–712. Available at: https://www.nature.com/articles/s41416-020-01182-z [Accessed 3 Dec. 2021].
[11] WHO. WHO leads the way towards the elimination of cervical cancer as a public health concern. September, 2018. https://www.who.int/reproductivehealth/cervical-cancer-publichealth-concern/en/ (accessed April 16, 2019)
[12] 13: 147. 4 Maringe C, Spicer J, Morris M, et al. The impact of the COVID-19 pandemic on cancer deaths due to delays in diagnosis in England, UK: a national, population-based, modelling study. Lancet Oncol 2020; 21: 1023–34.
[13] Castanon, A., Rebolj, M., Burger, E.A., de Kok, I.M.C.M., Smith, M.A., Hanley, S.J.B., Carozzi, F.M., Peacock, S. and O'Mahony, J.F. (2021). Cervical screening during the COVID-19 pandemic: optimising recovery strategies. The Lancet Public Health. [online] Available at: https://www.sciencedirect.com/science/article/pii/S2468266721000785

- The issues screening will have post-COVID-19, is the resource availability and women's willingness and ability to undergo screening. This is due to the need to also catch-up with patients that missed screenings in 2020.
- The long-standing availability of cervical cancer screening and the introduction of HPV vaccination in the late 2000s have decreased the burden of the disease well below that of breast and bowel cancer.

There has been a significant disruption caused by COVID-19 on Ovarian Cancer diagnosis and treatment

- The pandemic has caused significant disruption to OC with 54 percent of women reporting that their treatment has been affected by coronavirus.[14]
- 27 per cent of women with ovarian cancer told us that they are not able to access the same care and support as before the pandemic.[15]
- This has been compounded with the challenges of shielding – 79 percent of women with ovarian cancer were advised to shield (target ovarian cancer, 2020).
- A reason for the delay was due to the continuous need for testing and the confirmation that you need for COVID-19.[16]
- Due to the delay in the care for cancer patients, there are higher levels of cancer worry, anxiety and depression in women with OC, in turn affecting the overall care of the individuals leading to the need for more psychological support (Jacome et al., 2021)

[14] Frey MK, Ellis AE, Zeligs K, et al. Impact of the coronavirus disease 2019 pandemic on the quality of life for women with ovarian cancer. Am J Obstet Gynecol. 2020;223:725.e1–725.e9. doi:10.1016/j.ajog.2020.06.049

[15] Voices of women with ovarian cancer: the coronavirus pandemic and its impact. (2020). Available at: https://targetovariancancer.org.uk/sites/default/files/2020-07/Voices%20of%20women%20with%20ovarian%20cancer%20-%20the%20coronavirus%20pandemic%20and%20its%20impact.pdf

[16] Jacome, L.S., Deshmukh, S.K., Thulasiraman, P., Holliday, N.P. and Singh, S. (2021). Impact of COVID-19 Pandemic on Ovarian Cancer Management: Adjusting to the New Normal. Cancer Management and Research, Volume 13, pp.359–366. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7813454/#cit0042

The lack of clarity regarding the ability of cancer patients to get vaccinated leaves them more vulnerable

- Research published in April 2021 suggests that 6.5 in every 100 people were receiving COVID-19 vaccinations.[17]
- However, there is a massive confusion on whether cancer patients should be vaccinated or not due to their immunosuppressed bodies, meaning that they are unable to produce effective antibodies by themselves, making the vaccinations quite useful.
- The confusion on vaccinations also is around the booster vaccinations and whether there is a need for a booster vaccination and the number of boosters.
- From the briefing on 30th November 2021, the answer was that any person with a weakened immune system could get their fourth vaccination.

[17] Steel, K. (2021). *Coronavirus (COVID-19) Infection Survey, antibody and vaccination data for the UK*. *Ons.gov.uk*. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19infectionsurveyantibodydatafortheuk/28april2021 [Accessed 3 Dec. 2021].

THE RELATIONSHIP BETWEEN SOCIO-ECONOMIC STATUS AND EFFECTIVE CARE

Whilst there is an increase in incidences of cervical and ovarian cancer for the most deprived groups, there is an increase in incidences of breast cancer for the least deprived groups

- Cervical cancer incidence varied substantially within regions by socioeconomic group with a large increase in incidence occurring between the second and the most deprived group in most regions, except London and the East of England.
- This difference was most significant in the South West with an age standardised incidence rate of 10.3 per 100,000 (95% CI: 9.1–11.5) in the second most deprived group and 15.5 per 100,000 (95% CI: 13.3–17.7) in the most deprived group.
- The highest incidence rates for cervical cancer were recorded in deprived groups in the North West and South West.
- Screening up-take has been reported to vary by socioeconomic status [51] and be lower for women with low levels of education in England [52]. The lower incidence rates of cervical cancer for Southern England (East, South West, London and South East) are consistent with other national studies [31]. Socioeconomic-variations in screening up-take contribute to the regional variations in deprivation gap, although the regional variations and influence of HPV infection (and associated risk factors) remains an area for further study.
- Deprived women have lower levels of screening uptake to the national mammographic screening programme for 50 to 65 year olds (extended to 65 to 69 in 2007)[18], however there was little variation by socioeconomic status. The constancy across regions and socioeconomic status may possibly be due to high awareness among all groups.[19]

Socioeconomic status and accessibility to cancer care are inversely related

- Incidence was highest for the most deprived patients for cervical cancer, whilst incidences of breast cancer were the highest in the least deprived group as it is estimated that the number of cases would increase by 7% for breast cancer.
- Reasons why socioeconomic background affects the care for female cancers is due to the environmental factors like lifestyle, biological effects, access to healthcare and health seeking behaviour.[20] These are factors taken into consideration generally too.

[18] Socioeconomic deprivation, travel distance, location of service, and uptake of breast cancer screening in North Derbyshire, UK. Maheswaran R, Pearson T, Jordan H, Black D, J Epidemiol Community Health. 2006 Mar; 60(3):208-12

[19] Variation in incidence of breast, lung and cervical cancer and malignant melanoma of skin by socioeconomic group in England. (2008). Available at: https://link.springer.com/content/pdf/10.1186/1471-2407-8-271.pdf [Accessed 4 Dec. 2021].

[20] Shohaimi S, Welch A, Bingham S, Luben R, Day N, Wareham N, et al.: Residential area deprivation predicts fruit and vegetable consumption independently of individual educational level and occupational social class: a cross sectional population study in the Norfolk cohort of the European Prospective Investigation into Cancer (EPIC-Norfolk). Journal of Epidemiology and Community Health 2004, 58:686-691.

- cervical cancer incidence was highest in the most deprived group (RR 2.08 95% CI: 1.97–2.19) and decreased consistently with increasing affluence.[21]
- Breast cancer incidence was highest in the least deprived with modest differences between socioeconomic groups (Shack et al, 2008).

People of colour are at a higher risk of having cancer but are one of the least likely groups to have access to cancer care

- In the period 2006-2010, South Asian females and a group classed as "mixed" had a higher number of new cases of breast cancer compared to other white and ethnic groups (NCIN, 2015).
- For breast cancer again the overall incidence is lower in South Asians than non-South Asians but in general the incidence rose faster in South Asians than non-South Asians. The study also found a weaker or no deprivation gradient for overall cancer incidence in South Asians. For urological cancers, incidence rates were found to vary considerably by ethnic group.
- A local study examining cancer incidence in South Asian and non-South Asian populations under the age of 30 living in Yorkshire, UK also reported an overall rise in annual cancer incidence rates in South Asians and predict if this increase continues then cancer incidence will be three times higher in South Asians than non-South Asians by 2020 (Van Laar et al., 2010).
- On a general population level, there are clear links between socioeconomic status and cancer incidence and mortality indicating an inverse correlation (Cancer Research UK, 2008). However this is not the case for all cancers, (Lundqvist et al. 2016) report data from a systematic literature review and meta-analysis of studies from Europe in which they summarise that women with higher socio-economic status show significantly higher breast cancer incidence.
- Nevertheless, Gathani et al (2014) concluded that when adjustments are made for these risk factors South Asian and Black women were shown to have similar breast cancer risks to white women.[22]
- Jack et al (2014) found that the British White group were more likely to attend for breast cancer screening on a first and subsequent invitations and uptake varies by specific ethnic group with variations within the same ethic group in different geographical locations.
- Culturally appropriate interventions to reduce differences in the uptake of screening were recommended by Szczepura et al., (2008) after they analysed data for breast and bowel screening uptake patterns over 15 years in the UK for South Asian populations.

[21] Shack, L., Jordan, C., Thomson, C.S., Mak, V. and Møller, H. (2008). Variation in incidence of breast, lung and cervical cancer and malignant melanoma of skin by socioeconomic group in England. BMC Cancer, 8(1). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2577116/ [Accessed 3 Dec. 2021].
[22] Cancer and black and minority ethnic communities Dr Qulsom Fazil. (2018). [online] Available at: http://raceequalityfoundation.org.uk/wp-content/uploads/2018/07/REF-Better-Health-471-1.pdf

- Rockliffe et al (2017) suggests that within the 195 schools they researched, the uptake of vaccinations were much higher among the South Asian ethnicities whilst Black ethnicities were consistently low.

Different gender and sexual identities tend to have different experiences with cancer care

- "There is clear evidence too that LGBTQ+ women experience inequalities across a range of areas including cancer outcomes"[23]
- Prevalence of cancer diagnoses among sexual minorities has been reported in the UK. Among 240,010 treated cancer survivors, 2199 (0.9%) reported a sexual minority orientation.[24]
- no significant differences between sexual minority individuals and heterosexual individuals in prevalence of the most common cancers. (Saunders et al., 2017)
- no significant difference in overall prevalence of cancer between heterosexual women and lesbian or bisexual women (odds ratio 1.14; 95% CI 0.94, 1.37), although lesbian or bisexual women had higher rates of oropharyngeal cancers. However, gay or bisexual men had higher odds of cancer diagnoses overall, when compared to heterosexual men (odds ratio 1.31, CI 1.15, 1.50).[25]
- The UK surveyed 550 sexual minority patients, along with 68,737 non-sexual minority patients, about their cancer-related experiences.[26] After controlling for age, gender, and mental health comorbidities, sexual minority patients reported significantly more social isolation than heterosexual patients; they also reported a lack of patient-centered care and involvement in decision-making and a need for health professional training to negate the effects of heteronormativity.

A higher age pimples a greater risk of cancer

- Most cervical cancers develop due to HPV, an asymptomatic sexually transmitted infection which is carcinogenic. It's normally associated with younger people and a higher number of partners.

[23] Department of Health and Social Care Women's Health Strategy: Call for evidence About the College. (2021). [online] Available at: https://www.rcog.org.uk/globalassets/documents/news/2021-06-rcog-department-of-health-and-social-care-womens-health-strategy---call-for-evidence.pdf
[24] Saunders CL, Meads C, Abel GA, Lyratzopoulos G.(2017) Associations between sexual orientation and overall and site-specific diagnosis of cancer: evidence from two national patient surveys in England. J Clin Oncol.;35(32):3654–61.
This is the first national database study evaluating prevalence of cancer among sexual minorities, completed in the UK.
[25] Fish J, Williamson I. Exploring lesbian, gay and bisexual patients' accounts of their experiences of cancer care in the UK. Eur J Cancer Care (Engl). 2018;27(1).
[26] Hulbert-Williams NJ, Plumpton CO, Flowers P, McHugh R, Neal RD, Semlyen J, et al. The cancer care experiences of gay, lesbian and bisexual patients: a secondary analysis of data from the UK Cancer Patient Experience Survey. Eur J Cancer Care (Engl). 2017;26(4).

- Cervical cancer is higher amongst people from Asian ethnic groups compared with the white ethnic group in the over 65s."[27]
- When the median age of certain cancer diagnosis amongst minority ethnic groups is considered, for breast cancer the median age for black women is 50 years compared with 62 years for the white population (NCIN, 2010).
- Lowering the age of diagnosis is likely to be significant due to the younger demographic profile of black and minority ethnic communities in the UK and also a different lifestyle will be playing a role since one third of all cancers are related to smoking, diet, alcohol and obesity (NCIN 2017).
- Deprived women have lower levels of screening uptake to the national mammographic screening programme for 50 to 65 year olds (extended to 65 to 69 in 2007)[28], however there was little variation by socioeconomic status. The constancy across regions and socioeconomic status may possibly be due to high awareness among all groups.[29]

[27] Ncin.org.uk. (2016). Reports. [online] Available at: http://www.ncin.org.uk/publications/reports/ [Accessed 3 Dec. 2021].
[28] Socioeconomic deprivation, travel distance, location of service, and uptake of breast cancer screening in North Derbyshire, UK. Maheswaran R, Pearson T, Jordan H, Black D, J Epidemiol Community Health. 2006 Mar; 60(3):208-12
[29] Variation in incidence of breast, lung and cervical cancer and malignant melanoma of skin by socioeconomic group in England. (2008). Available at: https://link.springer.com/content/pdf/10.1186/1471-2407-8-271.pdf [Accessed 4 Dec. 2021].

INSIGHT

OVERVIEW

This section of the report will focus on the reasons behind the unequal access to female cancer care. The three points that we want to focus on are the psychological/ personal care barriers, the effect COVID-19 has and continues to have on the care of cancers and the need for better education and awareness of cancers to reduce the greater number of fatalities.

Due to prejudice and pre-existing biases, cancer care is worse for women

Women in general have been trying to overcome one of the greatest battle, the pain bias for many years[30]. The definition of a 'pain bias' simply put is 'women's pain not taken as seriously as men'[31] which is one of the main reasons why women are not being treated quickly and diagnosis being later leading to greater fatalities as many results show. One of the common thoughts within the healthcare community is that women 'exaggerate' their pain which in some instances causes more problems than solving the issues as it buries many women's problems further, leading to more harm being done than any good.

This may be one of the reasons why women don't come to open clinics as much due to them hyper fixating on an issue or pain that they feel as they are worried of wasting NHS time or being overlooked due to the impression that women are 'naturally weaker' than men. This is similar to the issue of many health issues that women face on a daily basis with general health issues that women go through. This has been the experience of many women. From being given a general diagnosis of 'heavy' or 'irregular' periods to actually being something more serious as endometriosis or PCOS, which are uncommon due to the misdiagnosis by many doctors due to the lack of concern that many doctors have in terms of understanding the female anatomy and the issues with it. Of course, this would come with education as a better understanding and training should help individuals understand fully the extent of the female anatomy and the pain that is felt on a daily basis.

One of the things that we want to see change is improving the diagnosis period. However, this seems to be near impossible if individuals do not feel comfortable enough to go to clinics due to the fear of not being heard and taken lightly of a concern they might have. At the moment, the clinics and GPs do not feel comfortable enough for anyone to approach, especially as waiting times for many services are so long and seeing a GP in person has become near to impossible due to COVID-19. Therefore, the comfort of meeting a doctor and expressing to them how you feel has completely vanished.

Another reason for the loss of belief in women compared to men could also be due to the lack of information out there that affects the right diagnosis for women, gender bias when treating or diagnosing women or the way we interpret pain between the different gender identities. We see this through the amount of treatment available for men compared to women. Women tend to be

[30] Billock, J. (2018). Pain bias: The health inequality rarely discussed. Bbc.com. Available at: https://www.bbc.com/future/article/20180518-the-inequality-in-how-women-are-treated-for-pain [Accessed 3 Dec. 2021].
[31] ScienceDaily. (2021). Womens' pain not taken as seriously as mens' pain: A new study suggests that when men and women express the same amount of pain, women's pain is considered less intense based on gender stereotypes. Available at: https://www.sciencedaily.com/releases/2021/04/210406164124.htm [Accessed 3 Dec. 2021].

given a 'one fits all' medicine, like the Pill[32], when there are so many other issues that surround the wellbeing of female health. Much research in recent years has shown that the Pill is actually doing more harm than good due to the many side effects that come with taking the risk of taking the medication. However, doctors, specifically GPs rely on the medicine due to the belief that it can aid all the issues women have with their health, when it actually can hide other health conditions that individuals might have and make existing issues heighten.

With the pain bias, it isn't just 'white' women that suffer. The Begum/ Bibi syndrome is also common when it comes to ethnic women. Recent studies show that women of colour, specifically South Asian women, tend to be ignored by doctors and not treated as well/ as quickly compared to other individuals[33]. Whilst this is 'medical racism', it is a massive issue that needs to be sorted and reduces the trust that individuals have on the NHS. It is only through the COVID-19 pandemic that we have seen the spread of the 'medical racism' as the pandemic hit worse on those of BAME background compared to those of 'white' ethnic origin[34].

[32] Zaria Gorvett (2018). The strange truth about the pill. [online] Bbc.com. Available at: https://www.bbc.com/future/article/20180822-the-birth-control-pill-can-have-male-side-effects [Accessed 3 Dec. 2021].
[33] Unzela Khan (2021). South Asians above the age of 30 experience the worst health out of anyone in the UK. [online] MyLondon. Available at: https://www.mylondon.news/news/health/pakistani-bangladeshi-people-above-age-22134803 [Accessed 3 Dec. 2021].
[34] ITV News (2021). Covid: South Asians in England suffered more deaths than other ethnic groups. [online] ITV News. Available at: https://www.itv.com/news/2021-05-01/covid-south-asians-in-england-suffered-more-deaths-than-other-ethnic-groups [Accessed 3 Dec. 2021].

The effect of track and trace, vaccinations and shielding has altered the type of cancer care that patients get

Since March 2020, the sole focus of both the government and health care systems was to tackle COVID-19, with a prediction of 161.75 people dying due to COVID-19 each week on average according to the ONS report.[35] Many researchers suggest that it was the government's management of COVID-19 that led to the poor outcomes and shortened survival for those needing treatment for cancer[36] as the delay in a test and tracing system meant that there was a delay in the confirmation of whether a patient had COVID-19 or not[37].

The pandemic created a standstill for many cancer patients especially due to the fact that 79 percent of women with Ovarian Cancer were advised to shield, meaning that they were unable to leave their homes to get treatment even if clinics were open. Due to the fact that some patients were or are on immunosuppressants, the patients were/ are quite vulnerable to the virus, risking them of more complications with their cancer or even making the case much more severe than an average person. This was a massive issue as shielding only ended for cancer patients on the 15th of September 2021[38]- a few months ago. This meant that many people missed months of appointments, which could have significantly reduced the severity of the cancer as the longer you wait for treatment, the more aggressive the treatment has to be due to the continual growth of cancer cells.

The system of test and trace was to reduce the infection rate of the virus; however, the rules that were placed were difficult to follow and frustrating for both patients and doctors as waiting for PCR test results took about 3 working days to arrive and lateral flow test kits were only made widely available from April 2021, though they were being used in exclusive places by the end of January 2021[39]. This meant that they needed to wait a long time for proper testing to happen to reduce transmission of the virus and not risk vulnerable patients. Again, meaning that treatment was delayed due to the pandemic and disorganised government.

[35] Ons.gov.uk. (2020). Coronavirus (COVID-19): 2020 in charts. Available at: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid192020incharts/2020-12-18 [Accessed 3 Dec. 2021].
[36] Gathani, T., Clayton, G., MacInnes, E. and Horgan, K. (2020). The COVID-19 pandemic and impact on breast cancer diagnoses: what happened in England in the first half of 2020. British Journal of Cancer, 124(4), pp.710–712. Available at: https://www.nature.com/articles/s41416-020-01182-z [Accessed 4 Dec. 2021].
[37] Jacome, L.S., Deshmukh, S.K., Thulasiraman, P., Holliday, N.P. and Singh, S. (2021). Impact of COVID-19 Pandemic on Ovarian Cancer Management: Adjusting to the New Normal. Cancer Management and Research, [online] Volume 13, pp.359–366. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7813454/#cit0042 [Accessed 4 Dec. 2021].
[38] Cancerresearchuk.org. (2021). Coronavirus shielding advice | Cancer Research UK. Available at: https://www.cancerresearchuk.org/about-cancer/cancer-in-general/coronavirus/shielding-advice [Accessed 4 Dec. 2021].
[39] Lateral flow antigen test FAQs. (n.d.). Available at: https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/11/C0913-lateral-flow-antien-test-trust-faqs-v3-jan-2021.pdf.

Not only that, research published in April 2021 suggests that 6.5 in every 100 people were receiving COVID-19 vaccinations which meant that it took longer for things to move to a more 'normal' pace within the healthcare system, leading to the disruptions for the whole network. This means that healthcare professionals may not all be vaccinated, service providers might not be yet vaccinated or refuse to take the vaccination. Some conversations on whether healthcare professions should be compulsory to be fully vaccinated by April 2022 are still being debated as this would reduce the chances of complications and landing in hospitals greatly. Not only that, it will reduce the recovery time and chances of delay in starting to provide widespread care, including cancer care to catch up from the last two years' disruption. On top of that, patients are not being vaccinated before coming to the hospital due to the new research suggesting that there is a low chance of the vaccine protecting individuals on immunosuppressants[40]. Additionally, new findings suggest that people with cancer had no or few neutralising antibodies, which made it somewhat useless in protecting cancer patients[41]. Nonetheless, research shows that a third vaccine dose could effectively boost immunity for vulnerable patients, but it is still a theorised idea, not tested and trialed. Therefore, it may take some time for us to find out what the best way to help support patients is, ultimately leading to more delays in care for female cancer patients.

[40] Roberts, M. (2021). Covid jab response low for some immunosuppressed people. BBC News. Available at: https://www.bbc.co.uk/news/health-58317261 [Accessed 4 Dec. 2021].
[41] Royalmarsden.nhs.uk. (2020). CAPTURE: COVID-19 antiviral response in a pan-tumour immune study | TRM Trust and Private Care. Available at: https://www.royalmarsden.nhs.uk/capture-COVID-19-antiviral-response-pan-tumour-immune-study [Accessed 4 Dec. 2021].

The lack of resources for both doctors and patients has led to a lack of knowledge in tackling female cancers

Firstly, to tackle the 'medical racism' and misinformation in medicine, we need to help reduce gaps in the education that doctors have in their training. This is due to the outdated resources that they have, from the limited textbooks and old case studies they have to work on which need modernising in order to fit the requirements of today's society.[42] This includes being able to cater to different gender identities, races and ethnicities.

As Mukwende discusses in 'Mind the Gap', there are less black students[43] that end up going to medical school, leading to a reduction in the number of doctors being of BME background, therefore, research not being done properly in issues that affect them particularly and overviewing them instead. Mukwende discusses how there is a lack of textbooks, even, that show the things to look out for when trying to detect cancer on coloured individuals' skin. This is due to the textbooks written, again, by 'white' individuals due to the lack of specialists in the field that are of colour. With the textbooks not going into depth on the information on detecting cancer signs on coloured people, there is a greater issue of the misleading asymmetric data that leads to a false diagnosis. With this knowledge, it is not hard to understand why there is a massive bias, as aforementioned[44].

According to the UK survey, 550 sexual minority patients reported significantly more social isolation than heterosexual patients and a lack of patient-centred care and involvement in decision-making[45]. This is due to the lack of training that is given to healthcare professionals, which can also have a negative effect on the treatment that the patient has. The need for health professional training to negate the effects of heteronormativity is imperative in order to help reduce the imbalance in the care of all patients.

This is where the need of updating in textbooks and the curricula is needed in order to help build more compassion for many individuals, which also goes for the aforementioned issue discussed within the pain bias where prejudice and pre-existing bias, possibly due to more traditionalist education tactics gets in the way of a timely and accurate diagnosis.

[42] Putsch, R.W. and Joyce, M. (2013). Dealing with Patients from Other Cultures. Nih.gov. Available at: https://www.ncbi.nlm.nih.gov/books/NBK340/ [Accessed 4 Dec. 2021].
[43] BBC iPlayer. (2021). Morning Live - Series 3: 09/11/2021. Available at: https://www.bbc.co.uk/iplayer/episode/m0011gbz/morning-live-series-3-09112021?page=1 [Accessed 4 Dec. 2021].
[44] Billock, J. (2018). Pain bias: The health inequality rarely discussed. Bbc.com. Available at: https://www.bbc.com/future/article/20180518-the-inequality-in-how-women-are-treated-for-pain [Accessed 4 Dec. 2021].
[45] Hulbert-Williams NJ, Plumpton CO, Flowers P, McHugh R, Neal RD, Semlyen J, et al. The cancer care experiences of gay, lesbian and bisexual patients: a secondary analysis of data from the UK Cancer Patient Experience Survey. Eur J Cancer Care (Engl). 2017;26(4).

POLICY RECOMMENDATIONS

OVERVIEW

As aforementioned, there are several identifiable problems in the overall functioning of the cancer care system. To begin with, there are a lot of false diagnoses due to pre-existing biases and prejudices based on gender and other social identities like race and ethnicity. This proves to be a problem especially due to their weakened immune systems that are more likely to be attacked by viruses for which vaccines are important. However, this group lacks accessibility to such vaccines that leaves them more vulnerable. Similarly, the outdated syllabus for medical students that doesn't account for differences in cases due to differing identities also leads to a difficulty in the accessibility of appropriate care and therefore, deepens inequalities.
Therefore, we suggest the following policy reforms:

- Action 1: Provide thorough training for individuals in order for them to gain trust from patients and understand their concerns than dismissing them
- Action 2: With another COVID-19 variant, there is a serious threat of further delay in care for cancer patients in general, but there needs to be more done to help combat these disruptions, two years into the problem in order to reduce fatalities in the future
- Action 3: The introduction of more inclusive education will help increase awareness and research that can facilitate a change in the way that research continues.

ACTION 1:

Provide thorough training for individuals in order for them to gain trust from patients and understand their concerns than dismissing them

The pain bias is one of the greatest issues when discussing health issues for women[46], including female cancer care. This is due to the lack of belief when women come to first line responders, which prolongs diagnosis affecting the treatment altogether. However, through thorough training and understanding, this should help reduce the pain biases that we have at the moment.

Furthermore, we also have a gender bias, which is closely linked to the issue of pain biases as they disproportionately affect more women than men. This is due to the lack of understanding of female pain tolerance, due to the lack of research in this area. However, having support groups through charities whilst waiting for diagnosis would have a massive impact in the way that individuals feel and understand the health problem better. Not only that, as doctors, there might be a clear understanding on how individuals feel about these issues. On top of that, the use of doctors having training, again to build awareness of how women deal with many issues rather than completely shutting away and invalidating their experiences, it is important that doctors understand how to speak to patients and pay attention to the emotions of the patient who might be diagnosed with cancer.

With thorough training for healthcare professionals in understanding how to differentiate between health anxiety and pain bias might help doctors understand the difference. One of the biggest issues as was mentioned earlier was that many women are diagnosed with 'health anxiety' due to the care that they have for their body and the lack of information that doctors have. This is due to the lack of research done on female health care in general (discussed further on). Therefore, many nurses and GPs dismiss patients with a generalised health anxiety, not only causing a strain on those services but also misdiagnosing patients when they should be taken seriously. With more understanding of the differences, through specialised therapists, there can be some understanding grown from this and perhaps make sure that future patients are not scarred by the same issues that have delayed processes for other women.

The combination of both physical and mental health physicians might help overall as cancer too puts a massive strain on individuals as it is a lifestyle change that could be short term or long term. Therefore, the collaboration of the two departments might be a good way to help tackle the issue of women being worried of not being taken seriously and having extra support would be very helpful. This would be very helpful at clinics, especially as human contact has proven to have a

[46] Billock, J. (2018). Pain bias: The health inequality rarely discussed. Bbc.com. Available at: https://www.bbc.com/future/article/20180518-the-inequality-in-how-women-are-treated-for-pain [Accessed 4 Dec. 2021].

massive impact in relaxing patients[47] (and have had first hand experience of lack of human touch through the pandemic[48]), which will allow appointments to go smoothly and have a more quality based appointment than impersonal appointments with many people not wanting to go for check ups again after uncomfortable appointments.[49]

[47] Greater Good. (2011). Hands On Research: The Science of Touch. Available at: https://greatergood.berkeley.edu/article/item/hands_on_research [Accessed 4 Dec. 2021].
[48] McCluskey, M. (2020). The Coronavirus Outbreak Keeps Humans from Touching. Here's Why That's So Stressful. Time. Available at: https://time.com/5817453/coronavirus-human-touch/ [Accessed 4 Dec. 2021].
[49] Cadman, L., Waller, J., Ashdown-Barr, L. and Szarewski, A. (2012). Barriers to cervical screening in women who have experienced sexual abuse: an exploratory study: Table 1. Journal of Family Planning and Reproductive Health Care, 38(4), pp.214–220. Available at: https://srh.bmj.com/content/38/4/214 [Accessed 4 Dec. 2021].

ACTION 2:

With another COVID-19 variant, there is a serious threat of further delay in care for cancer patients in general, but there needs to be more done to help combat these disruptions, two years into the problem in order to reduce fatalities in the future

Whilst the government discussed the need to get individuals vaccinated in the briefing[50], there is still no clear image illustrated on the process for cancer patients, especially due to the fact that many are imuno-crompromised. However, the introduction of the antivirals has been a huge success in helping cancer patients stay safe. The antibody treatments for COVID-19 patients with some cancers that don't respond to the vaccines, have been very successful. This is important as it means that those whose immune systems may not be able to develop their own covid antibodies after the vaccination will still have antibodies in the blood streams. This will give some protection to one of the most vulnerable groups in society. In August 2021, a new antibody treatment specifically developed for treating covid was approved for use in the UK called 'Ronapreve' and has been given to people with blood cancer in hospitals with COVID-19 to aid them in recovery[51]. This is a great star in reducing fatalities.

In addition to this, the briefing held on 30th november 2021 shared the plan that the government has implemented. They have staggered the rollout of the vaccinations, enabling the most vulnerable to be vaccinated first. As well as giving 12 to 15 year olds vaccinations for them to create a shield layer to protect the communities from the further spread of the variants of COVID-19. They also added the point of giving the fourth jabs to those that are immunosuppressed to boost their immunity and give them a fighting chance with COVID-19. With all of these different provisions in place, there is a real chance of things to stay standstill, which is a positive as it means that hospitals may not need to close their doors to patients and reduces the chance of insufficient staff in these areas.

The NHS long term plan (LTP) was published in January 2019 and set out the plans for the next ten years in England. The main aims were to have 75% of people with cancer to be diagnosed at an early stage (stage one or two[52]). Current waiting lists for hospital care are the worst on record,

[50] BBC iPlayer. (2021). BBC News Special - Coronavirus Update: 30/11/2021 - Signed. Available at: https://www.bbc.co.uk/iplayer/episode/m0012trw/sign/bbc-news-special-coronavirus-update-30112021 [Accessed 4 Dec. 2021].
[51] Blood Cancer UK. (2021). Blood Cancer UK | Antibody and antiviral treatments for people with blood cancer. Available at: https://bloodcancer.org.uk/support-for-you/coronavirus-COVID-19/covid-vaccine-blood-cancer/covid-antibody-treatment/ [Accessed 4 Dec. 2021].

[52] NHS England (2016). NHS England» NHS Long Term Plan ambitions for cancer. England.nhs.uk. Available at: https://www.england.nhs.uk/cancer/strategy/ [Accessed 4 Dec. 2021].

standing at over 5.6 million at the end of July 2021[53]. Therefore, there is a massive question on whether this target will be met by 2028 due to the massive backlog that the NHS has to catch up with. But there are no reports that are widely available to fully understand the effect the pandemic will have in meeting these goals[54] as new variants are causing some concern for the government and placing a strain on the NHS.

[53] The Health Foundation. (2021). Overtaken by events: COVID-19 and progress towards the NHS Long Term Plan | The Health Foundation. Available at: http://www.health.org.uk/news-and-comment/newsletter-features/overtaken-by-events-COVID-19-and-progress-towards-the-LTP [Accessed 4 Dec. 2021].
[54] The Health Foundation. (2021). Overtaken by events: COVID-19 and progress towards the NHS Long Term Plan | The Health Foundation. Available at: http://www.health.org.uk/news-and-comment/newsletter-features/overtaken-by-events-COVID-19-and-progress-towards-the-LTP [Accessed 4 Dec. 2021].

ACTION 3:

The introduction of more inclusive education will help increase awareness and research that can facilitate a change in the way that research continues

Throughout time, we have seen a gap in the education of individuals, but mostly doctors, who are meant to be experts. This is due to the outdated resources that they have which leads to a lot of the sources not being accurate to the new technology or discoveries. Also, the diversity in gender, race and ethnicity has also added an extra layer in the emergence of updates of these resources in order for doctors to create a safe space for patients to discuss any issues they are having and discuss treatment plans more comfortably.

By encouraging more coloured people to take on medicine, it may diversify the workforce in the healthcare systems. For example, the introduction of scholarships and grants for Black students studying medicine might encourage more BME students to take part in medicine. The Akindole medical scholarship[55] is one of the examples of the scholarships that are available for Black students who wish to study medicine. These scholarships help reduce barriers for students that might come from disadvantaged backgrounds.

The pandemic also brought up the question of the unequal care of 'other' patients. This is due to data that showed that COVID-19 was unequally affecting BAME patients more than 'white' patients. Due to this information being produced, it also raised questions in other people's minds on the overall health system. Many have argued that there is 'inherent racism' in the way doctors are trained in the UK. the University of Bristol Medical School students said that there were gaps in their training which left them unprepared to treat ethnic minorities, potentially compromising patient safety[56]. Therefore, the need for the change in the curricular, even though the curricula for degrees are more flexible and more focused on the different universities, the government does need to place some guidance in order to make the curriculum and the individuals better training for caring for coloured patients.

As Mukwende said in his book 'Mind the gap', textbooks have been written primarily by 'white' middle class men, giving less chance of diversity in the content that is written by the individuals, especially due to the homophobia that 'other' patients have faced and he addresses the way that there is a lack of diversity in both medical literature and education[57]. Therefore, by the help of funding to facilitate research done on ethnic minorities and differing groups, it might help broaden the way that doctors interact with patients in the future. Extra training in care for minority groups

[55] Abimbola, F. (2012). M.B.E. Available at: https://funkeabimbola.com/medical-scholarship [Accessed 4 Dec. 2021].
[56] By Smitha Mundasad (2020). The medical school trying to become anti-racist. BBC News. Available at: https://www.bbc.co.uk/news/health-53465113 [Accessed 4 Dec. 2021].
[57] Mind the Gap — Black & brown skin (2014). Black & brown skin. Black & brown skin. Available at: https://www.blackandbrownskin.co.uk/mindthegap [Accessed 4 Dec. 2021].

would be the best way to go through with updates every few years, to make sure that all doctors are up to date with the latest changes in social classified groups and can continue to give a good standard of care for each person.

CONCLUSION

Overall, the main recommendations we have are to increase the awareness of cancer in society whilst also giving doctors regular updates on the new research outcomes in order for them to have a nuanced and updated understanding surrounding cancer care. We also recommend more funding for research focused on marginalised groups, especially female healthcare, including cancer. Additionally, we hope to see the increase in vaccinations and different care available for patients for the period that COVID-19 poses a threat to our communities, whether that be through vaccinations or the introduction of antivirals and antibodies.