



Public Health Institute Journal (PHIJ)

Celebrating Academic Work by PHI students

Photograph by Arthur John Picton

Welcome

Welcome to the second issue of the Public Health Institute Journal (PHIJ). In this edition we present the abstracts of dissertation projects undertaken by our MSc Public Health, International Public Health, Public Health Addictions and Public Health Nutrition students. They are to be commended for producing high calibre, innovative and thought provoking work - all done during the COVID-19 pandemic. National restrictions, to stem the spread of the coronavirus, necessitated changes to how research was conducted. It also sparked interest in new topics and for some, mastery of online methods of data collection. Not surprisingly many students investigated the impact of COVID-19, covering mental health and well-being in the student population, physical activity levels among BAME students, eating behaviour and take away food consumption and the use of a weight management app during lockdown. Vaccination uptake amongst university students was also examined, as were social distancing and testing decisions, and adverse COVID outcomes for BAME groups. Whilst COVID-19 based research projects predominated, more traditional public health issues were not neglected and there is some excellent research around risky health behaviours, including substance misuse projects on SPICE amongst the homeless, skin infections and injuries among men who inject image- and performance enhancing drugs, the impact of national changes in public health policy on local drug treatment service delivery, and a review of the UK's 12 Step Groups for those seeking recovery from substance dependency. Childhood obesity, stigma and veganism, menstrual hygiene in the British army, parental experiences of free school meals, electronic cigarette use in pregnancy and the attitudes of gay men to physical activity are just a few of the other timely public health topics that were tackled this year.

The impact of Euro 2020 on domestic violence was examined through the print media and a gender-based violence and bystander intervention programme was evaluated. Prevention was the focus of several reviews, including infection prevention in the ambulance sector and preventing adolescent pregnancy in low and middle income countries. Social media continues to generate interest; there were projects on the influence of Instagram on perceived body image and weight management and the online sports betting behaviours of UK men. Sub-Saharan Africa (SSA) was the context for a cluster of reviews that looked at maternal mortality, CVD risk prevention in HIV patients, climate change and childhood diarrhoea. Tuberculosis in different countries was systematically reviewed, as was the consumption of processed meats and chronic diseases in Middle Eastern and North African countries. These abstracts provide a rich tapestry of the many contemporary public health issues affecting the world today that our MSc students consider important and relevant. Further they demonstrate our students' ability to apply in practice key public health concepts - prevention, protection and promotion - and a passion for and commitment to improving the public's health.

Finally, the cover image chosen for this issue showcases one of two beautiful cathedrals in Liverpool. The Liverpool Anglican Cathedral has been home to Liverpool John Moores University graduations for many years and marks a period of celebration and achievement. Whilst graduations have been postponed recently due to COVID-19, we are pleased to see them rescheduled for early 2022 and look forward to celebrating our students' success with them, their friends and family. We congratulate our MSc students on their excellent work and wish them much success as they embark on the next stage of their careers in public health.

Lorna, Conan, Jen and Jane

Mona Abdalla

Ethnicity and Adverse COVID-19 Outcomes in the UK: A Scoping Review

Abstract

Background: In December 2019, COVID-19 was first recognized. The WHO declared the spread of COVID-19 as a global pandemic on the 11th of March 2020. There has been an increase in the published and unpublished evidence that links ethnic minority groups and adverse COVID-19 outcomes which is similar to previous pandemics. This review aims to systematically explore the existing literature that investigates the connection between adverse COVID-19 outcomes and ethnicity.

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Methods: A scoping review was undertaken between January 2021 and August 2021 to investigate the influence ethnicity has on COVID-19 outcomes. A comprehensive search of databases using predefined search terms was conducted, to identify available literature. The relevant studies were identified based on the predetermined inclusion and exclusion criteria. Extracted data from relevant studies included first author, year and study aims. Tables and thematic analysis were performed to map out data available from existing literature.

Results: 1081 articles potentially relevant to the aim and objectives of the review were initially identified. After removing duplicates and screening the abstract and full texts for inclusion and exclusion criteria, nine studies were included in the review. Five key themes were identified; positive PCR results, in-hospital outcomes including hospital admission, case severity and ICU admission, risk of death, mortality rate and age.

Conclusions: Data from grey literature and preprint studies have indicated that individuals who belong to ethnic minority groups have a greater risk of acquiring COVID-19 infection than the white cohort. Additionally, they may suffer from higher ICU admission rates and mortality rates when compared with their white counterparts. Several gaps in the available literature were identified as well as recommendations for mitigating against health inequalities.

Keywords: Covid-19, SARS-CoV-2, Ethnicity, Adverse outcomes, UK

The Impact of COVID-19 on the Mental Wellbeing of Students at Liverpool John Moores University

Abstract

Background: With the COVID-19 pandemic necessitating restrictive measures to social gatherings, travelling, and other normal daily outdoor activities to limit the disease spread, the impacts have been huge on the UK public and the experiences of university students. Particularly, the closure of school buildings, bringing about a switch to online virtual teaching and learning, and the consequent disconnection of students from their usual campus social life have been huge disruptions. This study aimed to assess the effects of the COVID-19 pandemic on the mental wellbeing of students at the Liverpool John Moores University (LJMU) and identify the predominant stressors behind the effects.

Methods: A cross-sectional quantitative design was used in the study, utilising a one-time-response online survey that included the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) to collect data from LJMU students on their mental wellbeing and the stressors they may have experienced during the pandemic. Descriptive statistics were used to analyse the respondents' demographic data, WEMWBS scores and perceived COVID-19-related well-being stressors, while associations between mental wellbeing and identified stressors were analysed using Fisher's Exact Test.

Results: The results indicated that out of the 57 student-respondents, the majority were females (70.2%) and undergraduates (64.9%) while almost half (47.4%) were aged 30 or above. The mean WEMWBS score was 43.89 (SD \pm 11.4), the scores ranging from 14 to 68. Meanwhile, 64.9% had high or average WEMWBS scores. Out of the eight COVID-19-related stressors studied, 6 received an admittance rate of over 50%, ranging from 56.1% to 89.5%. However, the analysis on the association between any of the stressors and the student's mental wellbeing showed no statistical significance (α =0.05).

Conclusions: The results of this study suggest a negative impact of the COVID-19 pandemic on the mental wellbeing of LJMU students on the average. The most important wellbeing stressors, meanwhile, have been academic performance, fear of contracting the virus, lack of social contact and support from friends and family, and the changes in teaching and learning format. The researcher recommends, among other issues, further studies to delineate the impacts of the pandemic on specific psychological parameters such as levels of anxiety and depression.

Keywords: COVID-19-related stressors, Mental wellbeing, Student's mental well-being

Experiences and engagement of users of the 'Fresh Start' weight management app during the Covid-19 pandemic

Abstract

Background: The use of smartphone apps as a weight management intervention has continued to expand over recent years. The Covid-19 pandemic presented unique challenges to weight management services that accelerated the development of one such app '*Fresh Start*'. Limited research explores the experiences of participants using a single, new app over a standard twelve-week weight management program. This study captured those experiences as well as gaining an insight into how the Covid-19 pandemic impacted the health and wellbeing of app users.

Methods: Semi structured interviews were carried out with eight Fresh Start users. Initial interviews were carried out during April 2021, when they began using the app, and again twelve weeks later in July 2021. All interviews were carried out remotely over video-call. They were recorded, stored, and transcribed verbatim into the NVivo software package. App engagement was captured quantitatively using the volume of messages sent, through the app, by participants to their weight management advisor.

Results: Inductive thematic analysis was conducted. Initial interviews produced primary themes with several sub themes: 1) Reason for using the app and 2) Expectations of the app and of themselves. At follow-up further themes were identified: 3) Experience of using the app and its individual features, 4) behaviour change and 5) future expectations. Impact of Covid-19 was a further theme that emerged during interviews. The study found participants can engage with a weight management app when in-person services are unavailable. Participants valued tracking dietary intake, remote coaching and receiving weight management information via a smartphone. Covid-19 impacted participants significantly and presented further health and wellbeing challenges. The use of a weight management app was broadly positive in supporting participants to meet these challenges.

Conclusions: The '*Fresh Start*' weight management app provided valued weight management support to participants whilst no in-person weight management services were operational. Dietary tracking, coaching and information content were important to participants, many of whom had only used in-person services previously. The study suggests service providers should look to support existing services with remote options, ensuring continuity of service and support during adverse events such as a pandemic.

Keywords: Obesity, Weight management, Apps, Experiences, Covid-19, Fresh Start, Behaviour change

Zoe Bell

Fitspiration and body image: A qualitative study

Abstract

Background: Western society's 'toned' body ideal is commonly found on Instagram's 'fitspiration' pages, which aim to inspire healthy lifestyles through diet and exercise. Research suggests that these accounts have the potential to cause body dissatisfaction in women - a serious public health concern. Qualitative studies indicate that both positive and negative experiences of fitspiration are common, suggesting that further in-depth exploration is needed.

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Methods: The current qualitative study explored the motivations for accessing the accounts and experiences of fitspiration, alongside its perceived positive and negative effects. Three focus groups (total of 19 women, aged 20-23) were conducted.

Results: Discussions revealed how the unrealistic ideal and extrinsic motivation presented by fitspiration pages is negatively received, with participants placing greater emphasis on the effect of the picture rather than the accompanying caption. Analysis showed how individuals were easily overwhelmed by seeing too much fitspiration; this was commonly attributed to the design of Instagram and the algorithm, and suggested users had to actively avoid dysfunctional content. Participants reflected on periods of vulnerability to the negative effects of fitspiration, including during school-age years and the COVID-19 lockdown, when pressure to get fit intensified. This sample of women were critical viewers of fitspiration; they displayed advanced media literacy skills throughout and considered the influence of the body positive movement on Instagram. The findings can also be explained using the social comparison theory as participants negatively compared themselves to unrealistic ideals and preferred to follow more relatable accounts.

Conclusions: Overall, this study reflected on the societal changes needed to eliminate the pressure on women to use diet and exercise as a beauty product. This study also made feasible recommendations for Instagram, corporate companies, and media literacy programmes to improve and co-ordinate their efforts to alleviate and tackle pressures on their users from the content they are consuming. Changes to the algorithm and the promotion of media literacy through body positive activists are likely to prevent distressing fitspiration experiences.

Keywords: Fitspiration, Body image, Toned ideal, Extrinsic motivation

Divine Tim Bonghaseh

Knowledge, Attitudes, Perceptions, and Practices towards Cardiovascular Disease Risk Prevention and Management in Patients Living with HIV in Sub-Saharan Africa: A Qualitative Systematic Review

Abstract

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Background: Cardiovascular diseases (CVD) are projected to bypass HIV as the most common cause of death in sub-Saharan Africa (SSA) by the year 2030. People living with HIV (PLHIV) are more likely to develop and suffer from complications of CVD compared to their HIV negative counterparts. CVD prevention is therefore critical in this group to maintain positive health outcomes and improve health indices in the entire region. To achieve this, it is important to assess patients' understanding of CVD risks and explore their perceptions and practices, to design targeted interventions. This review was therefore performed to synthesise the best available qualitative evidence of the knowledge, attitudes, perceptions, and practices of CVD risk prevention and management from the perspective of PLHIV.

Methods: Three electronic databases (MEDLINE, CINAHL, PUBMED) were searched for references up to August 2021. Six records from Malawi, Kenya, and South Africa were retrieved and synthesised through a thematic analysis approach. PLHIV in most of the studies had poor knowledge and perceptions about CVD risks.

Results: Analysed data were categorised under two broad themes, namely, knowledge and perceptions, and attitudes and practices. Psychological factors such as stress and denial of HIV status and behavioural factors such as poor diet, physical inactivity, and taking antiretrovirals (ARVs) were often cited as the cause of CVDs. Patients were aware of the dangers of CVDs such as sudden death, vision loss, and heart attacks but had varied attitudes and practices towards its prevention. Financial hardship, unavailability of medication, and hearsay were the main factors that prevented adoption and adherence to both lifestyle measures and medical treatment. Conversely, social, community, family, and peer support, as well as the fear of developing life-threatening complications, motivated some PLHIV to adopt health-seeking behaviours and medical management.

Conclusions: These findings highlight the need for improved patient education and multi-morbid health promotion. It also stresses the need for health policy reforms, and an integrated approach to HIV and CVD treatment and care in SSA.

Keywords: Cardiovascular disease risk, HIV, knowledge, attitudes, perceptions, practices, SSA

Stephen Campbell

The Views and Experiences of Drug and Alcohol Treatment Professionals and People Seeking Recovery from Substance Dependency, that Influence Referral To, and Attendance at Twelve Step Groups in the UK: A Systematic Review of Qualitative Studies

Abstract

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Background: There is a high level of drug related mortality and morbidity in the UK. Although treatment is effective in reducing harm, funding cuts combined with unmet demand present significant public health challenges. Twelve-step groups (TSGs) are an approach to treatment that can improve recovery outcomes and reduce healthcare costs. This review examined the factors that influence referral to and attendance at TSGs in the UK, through the views and experiences of drug and alcohol treatment professionals (DATPs) and people seeking recovery from substance dependency (PSRFSD).

Methods: A qualitative systematic review was undertaken. A literature search was conducted on Medline, PsycInfo, Web of Science and CINAHL matching relevant eligibility criteria from inception to February 2021. The search strategy was developed using a PICO framework. Inclusion criteria were primary studies of qualitative data undertaken in the UK. Quality of the included studies was appraised using the CASP (2018) Qualitative Checklist. Analysis of the studies was conducted by utilising Thematic Synthesis (Thomas and Harden, 2008).

Results: Five studies were included in the review. The heterogeneity of study aims within the review provided a diverse range of evidence, illustrating similarities and differences within the themes across both review populations. There were no significant concerns about the quality of included studies. Three analytical themes emerged: 'benefits', 'concerns', and 'knowledge'. There were many reported 'benefits' of TSGs. Many of the 'concerns' and gaps in 'knowledge' about TSGs were shared between DATPs and PSRFSD, with the main exception of risk, which was limited to DATPs. Some contributing factors to 'concerns' related to gaps in 'knowledge'.

Conclusions: This review provided the first synthesis of the views and experiences of both review populations on this topic in the UK. It emerged that there are both positive and negative influencing factors shared across both populations and some key differences. Varying levels of knowledge and understanding about twelve-step recovery were apparent. This lack of clarity may disable both review populations from making informed decisions as to whether TSG attendance might be helpful. Improved knowledge, through training, could assist DATPs to provide consistent advice, guidance and twelve-step facilitation (TSF). Recommendations are made for training content, revised practitioner guidance, and improved TSF, where appropriate.

Keywords: Alcoholics Anonymous, Narcotics Anonymous, mutual aid, selfhelp, peer support, addiction, recovery, abstinence, influence, referral, attendance, barrier, facilitator

Abstract

Background: One of the most serious global health issues is maternal health. Maternal mortality is considered an important topic in global health and development debates. Although some nations have achieved significant improvements, Sub-Saharan Africa (SSA) continues to account for half of all maternal fatalities worldwide. There is a consensus concerning the importance of a strong health system, skilled delivery attendants, and women's rights for maternal health. There is no single easy, uncomplicated measure that can dramatically reduce maternal mortality; however, there is widespread agreement on the need for a robust health system, trained delivery attendants, and women's rights for maternal health. This study aims to identify socioeconomic factors associated with maternal mortality in Sub-Saharan Africa.

Methods: Peer-reviewed journal articles were collected from two databases (Medline and CINAHL) exploring quantitative and qualitative studies conducted in SSA (English language; between 2010 and 2021). The five-stage methodological framework of Arskey and O'Malley for scoping reviews was followed. Extracted data was charted and summarized narratively. After removal of duplicates and screening against the inclusion criteria. Sixteen articles met the inclusion criteria.

Results: The major determinants of maternal health service usage and maternal mortality were socioeconomic class, education, caste/ethnicity, religion, and culture. The key intermediary factors were women's residence, maternal age during childbirth, number of children, and media exposure. In SSA, the health system has evolved as a critical and independent intermediary component in maternal health.

Conclusions: Tailored programmes addressing cultural beliefs and attitudes, as well as low educational attainment, are required. Women's rights should be at the forefront of these activities. The creation of empirically validated metrics to assess and examine the link between women's empowerment and maternal health should be the focus of future research.

Keywords: maternal mortality, maternal death, maternal morbidity, Sub-Saharan Africa, socioeconomic factors

Gender based violence and bystander intervention programmes - an investigation into community members' knowledge, attitudes and confidence to intervene

Abstract

Background: Gender based violence (GBV) and more specifically violence against women and girls (VAWG) is global issue which occurs at alarming rates, with an estimated one in three women having experienced some form of GBV inflicted by an intimate partner or non-partner at some point in their life. VAWG and GBV was a pandemic in itself long before the outbreak of COVID-19, however since its outbreak, VAWG has been exacerbated, notably in, but not limited to, the domestic sphere. Bystander intervention (BI) programmes have shown potential as a main preventive strategy for GBV and VAWG and is considered one method to change societal attitudes in an attempt to reduce the prevalence of related violence. Such programmes have typically been implemented in education settings, with few programmes implemented in the wider community. The aim of this project was to evaluate what level of awareness and knowledge members within communities have regarding GBV and BI, their attitudes towards GBV, their confidence of being an active bystander and the need/want for BI programmes as an approach to reduce VAWG.

Methods: A quantitative approach was used (with the inclusion of some open-ended questions) through an online survey. The survey drew on Banyard's Confidence Scale, the Bystander Attitude Scale revised, the Bystander Behaviour Scale Revised and the Intent to Help Scale. The survey covered questions on participant's basic demographics, their knowledge of GBV and BI, their attitudes to GBV, their confidence and readiness to intervene and the perceived participant need for BI in community settings. Participants (n=130) were recruited using a convenience sampling method via social media. Quantitative data was analysed using descriptive and correlational statistics in SPSS. Open-ended qualitative survey answers were transcribed and coded. This study was approved by the Research Ethics Committee at Liverpool John Moores University.

Results: Data analysis revealed that the majority of participants had some understanding and awareness of GBV and BI, with most (60.7%, n=79) participants acknowledging that GBV is an issue in their community. The results of this study found that over half of the respondents had heard of the term GBV (52.7%) with a significant relationship between individuals who were educated and their knowledge of GBV ($P = .016$). A significant effect was observed between participants' attitudes towards GBV and whether they had heard of the term GBV ($P = .001$). There was no significant relationship discovered between individuals' attitudes towards GBV and their age, employment status or whether they had heard of BI. Over half (58.1%, n= 75) of participants reported having previously heard of the term BI. There was no significant correlation reported between having heard of BI and level of education age or employment status. There was a significant relationship between Individuals' confidence to intervene in cases of GBV and having heard of GBV ($P = .033$) suggesting that those with previous knowledge and understanding of GBV have higher confidence to intervene.

Conclusions: BI have the ability to constructively engage men and women in the fight against violence towards women. Positive changes in behavioural, cognitive, and attitudinal indicators have been documented after bystander interventions. The use of the socio-ecological model has pinpointed numerous protective factors across the societal, community, interpersonal and individual levels which can help develop future BI programmes as a primary preventive method against GBV and VAWG. Further research into the effectiveness of BI in low income and high alcohol dependence areas are needed to fully understand the effectiveness of BI in communities where GBV incidence remains high.

Keywords: gender-based violence, violence against women and girls, bystander intervention, community, Covid-19, pandemic, intimate partner violence, violence against women

Incidence and Comparison of the Factors associated with Treatment Delay of Tuberculosis in the UK and India - A Systematic Review

Abstract

Background: Tuberculosis (TB) remains a significant public health issue globally. A significant number of TB patients have been seen to have over 4 months delay in their diagnosis and treatment. Late initiation of treatment of TB increases the risk of its severity and transmission of the disease further in communities. A delay, both pulmonary and extra-pulmonary, is a major set-back in TB control worldwide. Reducing delay to access care is important to reduce the TB burden in countries like India with a high incidence of TB. The review aims to observe the treatment delay in India and the UK, identify and compare the associated risk factors and also, assess their effect on the treatment outcomes. It is also important to classify the delays, risk factors associated with them and their effect on the treatment outcome.

Methods: CINHAL, Medline, and Google Scholar were searched for studies that assessed factors associated with delays in diagnosis and treatment in populations suffering from TB in India and UK. Studies done between 2017-2021, satisfying the exclusion criteria were selected, followed by data extraction and analysis of the evidence through a narrative synthesis. Quality appraisal was an important step in the systematic review to maintain internal validity.

Results: The findings suggest the existence of treatment initiation delays in both the UK and India. Both countries have individual factors as well as common reasons for the delays. The factors include socio-demographic characteristics, TB-related symptoms, and conditions of seeking medical care. The median delay in initial care seeking and diagnosis was calculated as 10 days each, and 2 days for treatment initiation. The various domains identified for delay were negligence, facility-related issues, and social reasons. Such factors led to health-seeking delays and further delay in treatment initiation.

Conclusions: Future studies must use stronger evidence through cohort and case-control studies to establish further clarity on the factors associated with the delays. Interventions for reducing the knowledge gap and stigma, increasing the accessibility of services, active case finding; capacity building of providers, quality assured sputum microscopy, and communication skills will help reduce these delays.

Keywords: Tuberculosis, Factors, Treatment delays, Comparison, India, UK

Lynsey Dunn

Paramedic Views of and Adherence to Infection Prevention Control Measures within the Ambulance Sector: A Scoping Review

Abstract

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Background: Effective infection prevention control (IPC) within the ambulance sector is vital for the safety of patient care. However, previous studies have demonstrated poor compliance amongst ambulance staff and high levels of bacterial load on ambulance surfaces and equipment. The purpose of this scoping review was to explore the evidence base on the views and adherence to IPC measures within the ambulance sector, to identify key themes and any gaps in the research.

Methods: A scoping review of the literature published between 2010 -2021 was undertaken in July 2021 of three key databases to identify eligible studies. Further manual reference searches and grey literature searches were also undertaken. Studies were screened by title and abstract, and then by a full text review against specific inclusion criteria. The Arksey and O'Malley five stage methodological framework for scoping reviews was followed. Extracted data was charted, categorised and narratively synthesised.

Results: After screening against inclusion criteria, 13 studies were included in the review. Significant areas of non-compliance were found in relation to hand hygiene and the cleaning and disinfection of ambulances. Key barriers to effective infection prevention control highlighted across the studies were: access to facilities and equipment, emergency and operational pressures, lack of adequate training and procedural guidelines and behavioural and cultural norms.

Conclusions: The review highlights that improvements in infection prevention control are required within the ambulance sector. There are a number of existing barriers to overcome, including practical and operational challenges as well as cultural and behavioural issues. Further research is required to explore the potential of specific interventions to improve IPC standards within the ambulance sector, particularly those incorporating theories of behavioural change.

Keywords: Infection prevention control, IPC, Ambulance, Hand hygiene, Cleaning, Disinfection, Barriers, Views, Compliance, Adherence

Julie Edwards

Exploring takeaway food consumption, lifestyle behaviours and wellbeing amongst the UK population during Covid-19 pandemic.

Abstract

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Background: In December 2019, a new disease (Covid-19) caused by Sars-Cov2 first emerged in the city of Wuhan, China and subsequently spread worldwide within a short period of time. The WHO declared the disease a public health emergency of international concern. The pandemic has had an impact on nutritional and lifestyle behaviours by implementing social distancing and lockdown measures to reduce the transmission. It has also had a detrimental effect on human health and wellbeing. This empirical study aimed to explore the relationship between takeaway food consumption and wellbeing during Covid-19 restrictions among the United Kingdom population aged 18 -65 years, Furthermore, this study compares wellbeing amongst keyworkers and non-keyworkers.

Methods: The study comprised an online survey that included demographic information; anthropometric data; nutritional habits information; and lifestyle behaviours. The survey was conducted between the third UK lockdown (March-June 2021).

Results: 92 participants took part, aged between 18-65 years (71.3% female; 28.7% male). This research confirmed an association between takeaway food consumptions with wellbeing and BMI status. Adverse wellbeing was more prominent among keyworkers. Takeaway food consumption decreased during Covid-19 pandemic. However, fast food (38%) remained the most frequently consumed takeaway food amongst the population during the pandemic.

Conclusions: This is the first study to explore the behaviours and dietary choices amongst keyworkers in the UK, with particular focus on takeaway consumption and wellbeing during Covid-19 restrictions. However, further investigations are required among a larger sample.

Keywords: Covid-19, Psychological wellbeing, Keyworker, Eating habits, Lifestyle behaviours

Phebean Gahlè

Bloody tour: exploring the perceptions and attitudes of female soldiers regarding menstrual hygiene when on tour or exercise within the British Army. A qualitative study

Abstract

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Background: The aim of the research was to explore the experiences and attitudes of British female soldiers managing their menstrual cycle and menstrual hygiene whilst on deployment (including on tour and on training exercise) in the UK or abroad. The research also explored any psychological and physiological impacts of managing their menstrual hygiene within a predominantly male environment and considered potential policy and practice recommendations to improve women's health and wellbeing.

Methods: A qualitative approach was taken using semi-structured online interviews. Thematic analysis was undertaken to classify, examine, and report themes within the data. The study recruited a cohort of British army female reservist and female army veterans (n=7) from different corps across the United Kingdom (UK). All participants held noncommission officers' ranks and the mean age was 42.3 years. The longest serving reservist had 25 years of service and the shortest three years. Among the veterans, one had served for six years and the other had completed 16 years of service.

Results: British female soldiers work and live in some austere conditions, which makes keeping clean more difficult than being based at home. Many challenges and barriers were identified by participants in the study, which showed how female soldiers had to alter their hygiene practices due to factors such as: inadequate accommodation, inadequate washing facilities, a lack of running clean water and unsuitable sanitary disposable provisions. For some female soldiers, this led to embarrassment from having to carry waste sanitary products with them, in particular when this was seen by males.

Conclusions: The findings from this qualitative study corroborate previous research by demonstrating that there has been little advancement to improve female soldiers' experiences of menstruation on deployment and how this effects them being operationally ready.

Keywords: Women, Female, Soldier, Army, British, Periods, Menstrual, Menstrual hygiene, Sanitation, Stigma, Military, Barriers, Veteran, Reservists

Harish Gontumukkala

A Systematic Review on the Effect of E-Cigarette use in pregnant women and pregnancy outcomes

Abstract

Introduction: This systematic review aims to examine the impact of e-cigarette usage in pregnant women. The review will explore e-cigarette usage in pregnancy and pregnancy outcomes associated with a negative impact on the foetus followed by various comorbid conditions and potential outcomes, especially with the usage of e-cigarettes.

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Methods: A deductive method to identify patterns and trends of e-cigarette smoking in various targets and different countries was used to analyse the impact of e-cigarette use on pregnant women. The secondary research method used in this systematic review was intended to collect published information and evidence and compare it with existing results.

Results: A total of 19 articles (10 human and 9 animal-based) were chosen for this research. The researcher selected peer-reviewed articles and ensured that these research findings were published and reviewed by the researcher and healthcare professionals. Articles suspected of being false, invalid or unreliable are excluded to overcome the risk of lack of overall research results.

Conclusions: The obtained results highlighted harmful effects of e-cigarettes and smoking in pregnant women, smoking and prenatal exposure to e-cigarettes, effects of e-cigarettes on the foetus, and smoking cessation interventions in pregnancy.

Keywords: Electronic cigarettes, Pregnant women, Pregnancy, Smoking, Usage, Impact, Outcomes, Foetus

Exploring young (aged 20-25) UK black ethnic minority adults' experiences of physical activity during the 1st COVID-19 lockdown

Abstract

Background: The research aimed to explore the young UK black ethnic minority adult's aged 20 to 25 experiences of how they had maintained their physical activity for the duration of the 1st COVID-19 lockdown. The research focused on Black African, African-Caribbean, and Black British Citizen population groups. The research endeavoured to identify physical activity levels before the lockdown and during the lockdown, ascertain facilitators and barriers to physical activity during the lockdown, and understand the perceived impact of physical activity levels during the lockdown on health and wellbeing.

Methods: The research utilised a qualitative methodology using online semi-structured interviews through Zoom, the teleconference program. Thematic analysis was employed to recognise, analyse, and convey the patterns and themes in the data. The participants in this research were ten young black ethnic minority adults' aged 20 to 23 residing in the UK.

Results: All of the participants displayed an understanding of physical activity and its role in their lives. Findings also demonstrate that some participants were physically active with aerobic exercises before the lockdown; however, their physical activity levels decreased at the beginning of the lockdown due to behavioural change and other personal commitments such as university. During the lockdown, facilitators to physical activity were identified as: self-concept, body image, inspiration/ role model, social influence, and employment. Barriers to physical activity participation were demotivation, a lack of physical activity infrastructure, and mental health problems. The impacts of physical activity during the lockdown on health and wellbeing identified that most participants who engaged in little physical activity had experienced more positive health and wellbeing than those who did not participate in any physical activity.

Conclusions: The key recommendations of this research pinpoint the need to investigate the gap in young UK black ethnic minority adults' physical activity during the 1st COVID-19 lockdown. This might aid with understanding the physical activity levels of young black UK ethnic minority adults' and provide additional support for them if needed. Another recommendation is that government policies may be used to target young black UK ethnic minority groups with educational resources on participating in physical activity before and during a future national lockdown. Lastly, establishing age-appropriate health promotion interventions in physical activity may encourage young black UK adults aged 20 to 25 to participate in physical activity.

Keywords: Physical activity, Black ethnic minority, Covid-19, Lockdown, Qualitative

John Horton

Empirical exploration into perceptions towards a Covid-19 vaccination and how attitudes and belief systems may influence vaccination uptake among Students in Higher Education in England

Abstract

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Background: Vaccine hesitancy is a threat to vaccine uptake and can reduce the collective benefit vaccination programmes offer through herd immunity. Although vaccine uptake is generally high in the UK, at the time of this study the vaccination programme had moved through a tiered system, starting with those most at risk from Covid-19 related health harms, and then continue down through the population age brackets. Currently the vaccination programme is covering the mean age (28.12) of students sampled in this study. Therefore, it may be critical to understand the reasons behind vaccine hesitancy within this group of the population to help inform targeted public health intervention. The aim of this study is to explore perceptions towards a Covid-19 vaccination and how attitudes and beliefs may influence vaccination uptake among students in Higher Education in England

Methods: A cross-sectional online survey with convenience sampling was undertaken with Higher Education students in the UK. Participants must have been currently studying and live in the UK to participate. A total of 154 individuals were recruited, (18 participants were excluded) with a final sample size of 136. Vaccine beliefs were measured across 4 domains; Barriers; Safety; Seriousness in my age; and Cue to action.

Results: Vaccine beliefs and attitudes were predicted by White ethnicity ($b = -23$, $t = -2.95$ $p < .004$), higher perceived safety of vaccine ($b = -45$, $t = -5.04$ $p < .001$), higher cue to action score ($b = .49$, $t = 6.15$ $p < .001$), higher perceived seriousness of Covid-19 to people of participants' own age ($b = .18$, $t = 2.28$, $p < .025$).

Conclusions: Vaccine hesitancy was explored, and associations discovered between predicted variable outcomes and vaccine hesitancy. Recommended future research into vaccine hesitancy may wish to further explore the association between perceived seriousness of Covid-19 by age as vaccination continues in younger age brackets. It would be beneficial to understand if fears concerning the safety of the Covid-19 vaccine is greater than the fear of the perceived health risks from catching Covid-19.

Keywords: Hesitancy, Vaccination, Covid-19, Students, Higher education

Tuberculosis infection control measures in healthcare facilities, and their implementation in sub-Saharan Africa: A scoping review

Abstract

Background: Tuberculosis (TB) is one of the top 10 causes of mortality and the leading cause of death from a single infectious agent globally. In 2019, the World Health Organization (WHO) African Region accounted for 25% of global TB incidence and occupational transmission of TB in healthcare facilities is considered one of the most important transmission factors. It is, therefore, important to address TB infection control measures that limit transmission in healthcare facilities, especially in light of increasing prevalence and new drug resistant strains. The aim of this review is to discuss TB infection control measures in healthcare facilities, and explore their implementation status in one of high TB burden regions: sub-Saharan Africa.

Methods: A scoping review was conducted, allowing the inclusion of different study designs which was necessary for answering the broad research questions. Intervention studies, literature reviews and grey literature were included to identify descriptions of TB infection control measures and their contribution to TB prevention. Cross-sectional and observational studies were included to explore the implementation of these measures in sub-Saharan Africa. The WHO guidance on TB infection control measures (2009) was used as a framework for description of the measures.

Results: Twenty-seven studies were included in the scoping review. Twelve studies (grey literature and traditional reviews) provided information about TB infection control measures, six intervention studies provided information on impact of some TB control measures on TB transmission, and nine studies provided information about the implementation status of the measures in sub-Saharan Africa. Four categories of TB control measures were identified: managerial; administrative; environmental; and personal protective. The review found poor implementation and reporting of these measures in healthcare facilities in sub-Saharan Africa including low levels screening of coughing patients for TB, and poor implementation of environmental measures such as UV light, and personal protective measures such as N95 respirators.

Conclusions: Despite the presence of well-designed WHO guidelines for TB infection control measures in healthcare facilities, there is poor implementation of them in sub-Saharan Africa. Therefore, a rapid global response to infection control in healthcare facilities is required for controlling TB.

Keywords: Tuberculosis, Infection control, Healthcare facilities, Sub-Saharan Africa

Maureen James

Evaluating the Effectiveness of Current Interventions on the Prevention of Adolescent Pregnancy in Low and Middle-Income Countries: A Scoping Review to Evaluate Interventions and Strategies

Abstract

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Background: Adolescent pregnancy is a global public health concern though with higher prevalence in low and middle-income countries (LMICs). Approximately 21 million girls become pregnant every year with an estimated 12 million of those going on to give birth. Preventing adolescent pregnancy requires having knowledge of causation or determinants so that relevant and effective strategies can be implemented to reduce the prevalence of adolescent pregnancy in LMICs. The aim of this review is to evaluate the effectiveness of current interventions on the prevention of adolescent pregnancy in LMICs.

Method: The scoping review was conducted based on Arksey and O'Malley's framework, the methodology and guidance of conducting scoping review developed by the Joanna Briggs Institute (JBI) and using the PRISMA guidelines for reporting scoping review. The search included three electronic databases (Medline, PsycINFO and CINAHL) and grey literature from google scholar. The search was confined to studies published from 2010-2021 with participants aged 13-19 years. Studies were included if they had intervention programs on adolescent pregnancy in LMICs.

Results: The scoping review included 10 studies that were relevant to the topic of review and met the criteria after abstract and full text screening. Interventions such as access to targeted family planning, cash transfer, educational empowerment programs and text-messaging programs were identified to have a significant impact on reducing adolescent pregnancy. However, these intervention programs had their limitations which included access to health services, cost effectiveness and reluctant behaviour of individuals. There is a need for further research and longer duration programs and evaluation studies to effect changes.

Conclusions: Adolescents in LMICs are exposed to risky sexual behaviours and geographical factors that increases pregnancy outcome such as poverty, early marriage, and abuse. The result of this study provides an insight as to why further research needs to be done to improve adolescent's sexual reproductive health.

Keywords: Adolescents, Pregnancy, Interventions, Low and middle-income countries

Spice (Synthetic Cannabis) use among the homeless in England: A Scoping Review

Abstract

Background: There is a significant area of concern in the use of spice among the homeless despite the enactment of the Psychoactive Substance Act (2016). The increase in the number of people experiencing homelessness in England suggests that this drug problem will continue. It is vital that we understand spice use among the homeless in order that appropriate support can be provided. The aim of this scoping review is to explore the use of Spice (synthetic cannabinoids) among the homeless people in England.

Methods: A systematic review of the literature published in England from 2015 to 2019 was carried out in August 2021 from the databases: Cumulative Index to Nursing and Allied Health Literature (CINAHL), PubMed (MEDLINE), PSYCHINFO, Web of Science and Scopus, in order to identify eligible studies. Studies were screened by title and abstract, followed by a full text review. Arksey and O'Malley's five stage methodological framework for scoping reviews was followed. Extracted data was charted, categorised, and summarised narratively.

Results: The scoping review process identified 13 studies for review. The data extraction process resulted in the identification of four themes: the characteristics of spice users; motivating factors for taking the drug; evidenced effects of taking the drugs among the homelessness; and policy/regulatory challenges of tackling the drug problem.

Conclusions and recommendation: The review highlights that homelessness reflects deep-rooted structural inequalities of society. The condition causes vulnerability which increases susceptibility to drug use. The study recommends addressing the homelessness problem in the first place as a health protection measure that could deter for drug use. Beyond this, health prevention and health education, through tailoring service provision to this vulnerable group is necessary.

Keywords: Homeless, England, Spice, Synthetic cannabinoids, Scoping review

Martine Kehoe

COVID-19 and the Eating Behaviours and Emotional Wellbeing of UK Adults (CEBEW): A Cross-Sectional Observational Study

Abstract

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Background: This study aims to compare the differences, before and during Covid-19 restrictions, in food intake and wellbeing respectively while ascertaining the relationship between various food groups with components of wellbeing.

Methods: A cross-sectional observational study of UK adults (aged 18–65 years) was launched in March 2021 and conducted across the UK. Due to the ever-changing public health rules for the various regions of the UK, questions around food consumption, physical activity, emotional wellbeing, amount of sleep and quality of sleep, required responses from “before” and “during” lockdown restrictions, with demographic and lifestyle factors being self-reported. The study had two research questions: 1) Is there a difference between food intake and wellbeing respectively, before and during Covid-19 restrictions? 2) Are any changes in food intake and/or wellbeing linked to each other in a bidirectional manner? Participants (N = 94) were UK residents aged between 18 – 65 years and were not experiencing symptoms of Covid-19 or long Covid at the time of completion.

Results: Participants were predominantly white (87%), single (43%), female (71%), aged under 30 years (36%) and living with their spouse (43%) with no children (74%). More than a quarter of the participants (26%) lived in the 10% most deprived areas of the country and 37% were classed as obese. There were statistically significant decreases in healthy foods ($p < .001$); vigorous exercise ($p = .004$); muscle strengthening exercise ($p < .002$); feeling happy / calm ($p < .001$); feeling cheerful / hopeful ($p < .001$); sleeping hours ($p = .003$) and the quality of sleep ($p < .001$). There were also statistically significant increases in participants feeling lonely / isolated ($p < .001$) and the consumption of unhealthy foods ($p < .001$). There were positive correlations between increased light exercise and increased lean meat consumption ($p < .001$) and an increase in the frequency of light exercise and feeling happy / calm ($p < .001$).

Conclusions: Covid-19 restrictions impacted negatively on nutrition and exercise behaviours, and unhealthy food was associated with loneliness.

Keywords: Covid-19, Wellbeing, Eating behaviours, Exercise

Paul Kenyon

A qualitative study exploring the attitudes of gay men towards physical activity and how they were influenced by experiences during physical education at secondary school

Background: Physical activity is essential to maintaining good physical and mental health. The health needs of gay men are poorly recorded, but some studies have suggested that gay men experience specific barriers to participation in physical activity. Similarly, it is documented that gay adolescents also experience barriers to participation during physical education at school. Despite these observations, no studies have explored these phenomena together to see if negative experiences in physical education at secondary school impact on gay men's attitudes towards physical activity in adulthood.

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Methods: A qualitative phenomenological design was used to conduct the research, using semi-structured online interviews. A sample of ten participants was obtained using a snowball sampling method. Interviews were transcribed and analysed using thematic analysis.

Results: The study findings showed that gay adolescents face several barriers to participation in physical education. Changing rooms were a particular area of concern for participants as they experienced significant homophobia. This was also experienced during team sports which they expressed a desire to avoid. The study also revealed that they found gender segregated lessons and lack of confidence in their ability to be barriers to participation. In adulthood, gay men were found to experience barriers associated with a homophobic culture within sport and negative stereotyping of gay men. The study also revealed the existence of a gay sub-culture that promotes physical activity as a way to appear more attractive, although participants preferred to diet rather than exercise to maintain a healthy weight.

Conclusions: Despite some similarities in participant experiences during school-based physical education and physical activity in adulthood, the study was unable to find any conclusive relationship between the two experiences. Despite all participants expressing avoidance behaviours in physical education, almost all participants currently engage in some form of physical activity in adulthood.

Keywords: Barriers, Physical activity, Physical education, P.E., Gay men, Team sport, Gay adolescent, Homophobia, Body image

Haya Khazaei

A quantitative study of the impact of COVID-19 social restrictions on the health and well-being of Liverpool John Moores University (LJMU) students

Abstract

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Background: The Coronavirus Disease 2019 (COVID-19) social restrictions, including the movement to online learning, has disturbed students' well-being. Their living situations were among the factors that led to this. Well-being is a vital public health issue. The initial review for this study indicated that previous studies on the topic did not differentiate between students based on their living conditions. Therefore, this study aimed to examine if the effect of the restrictions on students' well-being differed if they lived with their families or otherwise.

Methods: An online questionnaire was created and filled out by LJMU students. Questions about well-being, stress, life satisfaction, general health, social isolation and learning environment were asked using standard scales. Mann-Whitney U tests were then carried out to investigate the significant differences between two groups of students, students living with their families and students living otherwise.

Results: The study had 37 participants, 64.9% were living with their families and 35.1% were living otherwise. The impact of the restrictions on overall well-being was found to be higher among students living otherwise. Nevertheless, the impact of the restrictions on stress, life satisfaction, and general health and the impact of moving to remote learning on well-being and social isolation was higher for students living with their families. The effect of the learning environment on the transition to online learning was higher on those who live otherwise. However, the differences between the two groups were not statistically significant.

Conclusions: The indications of this study could be used to guide local well-being interventions for students. Even so, the implications could be limited due to the small sample size. There is a need for more research on the same topic to be applied to a larger sample. The time in which the study was conducted could have also been a factor that influenced the indications. More research is needed to compare the impact of the three lockdowns on students. Further, more studies are required to examine students' family relationships and their impact on students' well-being.

Keywords: COVID-19, Social restrictions, Students, Well-being, Stress, Life satisfaction, General health, Social isolation, Learning environment, Remote learning

Exploring the determinants of human behaviours in Social Distancing and COVID-19 Testing decisions: A Scoping Review

Abstract

Background: The World Health Organization declared COVID-19 a pandemic in March 2020 and has continued to be a public health disaster worldwide ever since. Several public health and social measures are recommended and have been taken up by governments to prevent the spread of infection. These measures include social distancing, hand washing, avoiding touching face and nose, not going outside, getting tested for the virus and self-isolation if infected or in contact with the disease. These measures are known as 'behavioural vaccines' and are viewed as critical in mitigating the spread of infection, however, in order for them to work it requires consistent behaviour among the population. The aim of the scoping review was to explore the behavioural determinants of social distancing and testing among the population of United Kingdom (UK), to assess adherence to these behaviours and factors affecting adherence.

Methods: A scoping review of all types of articles published from April 2020 to April 2021 was done utilising different database searches. Articles were scanned by relevance from titles and abstract and then full text was reviewed on the final included articles (n=14). A five-stage methodological framework was followed for reviewing, charting and narrative synthesis of the data.

Results: Fourteen articles were included in this study for review. Factors affecting the adherence to behaviour for social distancing and testing was further reviewed. The scoping review highlighted that as the severity of the disease increased, adherence to behaviour increased. The older population was seen to follow adherence more than the younger generation. Due to various circumstantial issues such as staying alone, it was not possible for many people to adhere to the social distancing and testing policy.

Conclusions: These findings throw light on the important part played by behavioural responses of the community. There are certain barriers and facilitators allied to social distancing measures and test and trace. Recommendations are made to convey clear messages that are timely and context specific.

Keywords: Social distancing, Behavioural determinants, Adherence, Testing for Covid-19, Covid-19, Barriers, Facilitators, Test, and trace

Sam Mangan-Taylor

A Scoping Review on Understanding Stigmas and Their Prevalence in Relation to Vegans and Exploring & Initiating a Change in Perception

Abstract

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Background: The interest in adopting a vegan diet is increasing across the globe, gaining more media coverage and is expected to grow even further within the next 20 years. Taking this into consideration, there is a risk of an increased level of stigmatization towards current vegans as well as individuals considering making this transition. In order to tackle potential stigmatization, the prevalence of stigma in today's society is crucial to recognise in order to identify new modernised approaches and strategies that can help to challenge current stigmas as well as tackle potential new stigmatization over the coming years in order to break down and eliminate stereotypical views.

Methods: A scoping review was carried out in order to define and identify stigmas in relation to vegan diets and also to identify current and potential new approaches and strategies in order to help eliminate and challenge identified stigmas. A search strategy was developed through various databases using specified search terms and an inclusion and exclusion criteria. The scoping review applied and used a suitable framework PCC (Population, Concept & Context).

Results: Overall, 20 studies were selected to be included within the review, all of which were sourced from peer reviewed journals. From the studies selected, five related to definitions and frameworks of stigma in order to provide contextual background regarding stigma and help to define and identify vegan stigma. Six studies focused on defining vegan stigma and the different forms in which it exists and is currently prevalent. A further six studies focused on gaining an insight of how vegans experienced stigmatization and potential routes in which vegan stigma may originate. The remaining three studies focused on current approaches and strategies which can initiate change and challenge current stigma as well as potentially identifying new modernized methods.

Conclusions: It was determined that stigma was a complex term to define universally, however it was identified that early methodologies and frameworks helped to define and identify different forms of vegan stigma and their prevalence in today's society. It was found that stigmatization, from the experience of vegans, predominantly originated from carnivores, however other groups such as vegetarians also create a level of stigmatization towards vegans. Gender was also an issue identified and lightly touched upon however further research is needed within this area in order to produce reliable evidence in which conclusions may be drawn. From this, it was identified that traditional methods, approaches and strategies such as education, contact and protest were of use. However, due to the growing interest surrounding vegan diets, more modernized techniques such as social media and the labelling of vegan food products would be useful in order to initiate a change in thinking and breaking down stereotypical views and stigmatization towards vegans.

Keywords: Vegan, Veganism, Vegan diets, Non-vegan, Omnivore, Meat eaters, Stigma, Stigmatisation

Impact of climate change on the incidence of childhood diarrhoea in Sub-Saharan Africa: A Scoping Review

Abstract

Background: Climate change is recognised as an important risk factor to public health and indeed child health in the 21st century. Climate change is expected to increase global temperatures and rainfall intensity and frequency and, if preventative action is not taken, may further widen health inequalities, hinder the attainment of the Sustainable Development Goals and reverse the child survival gains made over the last decade. It is projected that there will be an impact on a number of climate sensitive diseases including childhood diarrhoea. It is therefore imperative to gather evidence on the association between climate change and diarrhoea incidence in children. The objective of the study is to map out literature on the climate change impacts on the incidence of childhood diarrhoea in Sub-Saharan Africa.

Methods: A scoping review of literature was conducted where relevant databases were searched. Papers were screened first by title and abstract then full text screening. Studies were selected (n=15) against the set inclusion and exclusion criteria.

Results: Studies reviewed assessed three climatic variables: temperature, rainfall and humidity. The review revealed varying results on the association of climate factors and incidence of childhood diarrhoea. The review found that increases in temperature and increases in precipitation and precipitation intensity caused an increase in diarrhoea incidence. Relative humidity still needs to be explored further as results are inconclusive.

Conclusions: Climate change is impacting negatively on childhood diarrhoea diseases. However, the association between climate variability and diarrhoea cannot be fully considered without accounting for other confounding variables that are risk factors of childhood diarrhoea. Further research is needed to explore the interactions of climate change and childhood diarrhoea incidence giving projections of morbidity over a long period of time.

Keywords: Climate change, Climate variability, Childhood diarrhoea, Sub-Saharan Africa

A mixed methods exploration of parents' experiences of free school meals in Wirral

Abstract

Background: The United Kingdom is thought of as one of the richest countries in the world and the idea that many of its citizens face hunger every day seems contradictory. Years of austerity and welfare cuts have increasingly widened the gap between the richest and poorest members of society, allowing inequalities to manifest, of which childhood food poverty has fallen victim to. This study aims to explore the views and lived experiences of parents from schools in Wirral who currently receive Free School Meals (FSM) for their children. In particular, the research will seek to examine the demographic characteristics of participants, their perceptions of stigmatisation and challenges to accessing FSM, along with the extent to which the recent media campaign led by Marcus Rashford has affected these experiences and perceptions. This research was conducted with the hope of adding to the existing literature surrounding FSM in the UK, and in particular, adding to the currently limited literature on the effects of COVID-19, and the Marcus Rashford campaign on recipients of FSM.

Methods: Data was collected via an online JISC survey. The survey was sent to parents who met the inclusion criteria through parent emails and announcements, achieved via gatekeeper contact with both primary and secondary schools in Wirral. Questions within the survey followed logically from the research objectives, with a range of both closed and open questions, inviting both quantitative and qualitative analysis.

Results: Results found that participants' experiences with FSM were varied, with a mixture of positive and negative experiences, regarding their respective school's FSM policy and experiences of stigmatisation and embarrassment. A key problem participants highlighted as access to FSM in the school holidays, with the nature of FSM provided during COVID-19 being a common topic of debate. Knowledge around the Marcus Rashford campaign on FSM was varied, with a small majority of participants claiming to be aware of it.

Conclusions: The key takeaway messages from this study, is that more research particularly needs to be conducted on FSM and school holidays, along with the effects of the Marcus Rashford campaign.

Keywords: Free school meals, FSM, Food poverty, Childhood food poverty, Covid-19, School holidays, United Kingdom, Wirral, Foodbanks, School, Campaign, Marcus Rashford, Stigmatisation

Brittany Mountford-Tilley

A scoping review to assess what we know about the consumption of processed meat and chronic diseases in adult populations residing in high income countries located within the Middle East and North Africa (MENA)

Abstract

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Background: Processed meats are meats that undergo treatment to improve the shelf-life and taste of the product. Consumption of processed meat has increased worldwide, with more economically developed countries consuming higher levels. The MENA region of the world is increasingly becoming more developed, with their gross domestic product (GDP) rising rapidly. Alongside the rise in GDP, processed meat consumption has also been increasing, with the region experiencing a nutrition transition. With an increase in processed meat consumption comes an increase in chronic disease, and research shows that consumption of processed meat can be linked to an increased risk of various chronic diseases. However, many professionals believe that more research is needed on the topic, as results are often contradictory. The aim of this study is to conduct a scoping review on extant literature pertaining to processed meat consumption and levels of chronic diseases in adult populations residing in high income countries located within the Middle East and North Africa (MENA).

Methods: A scoping review of studies conducted between 2010-2021 based on processed meat consumption and any chronic diseases of adults within HICs in the MENA region was carried out using seven databases. The scoping review followed the Arksey and O'Malley framework, allowing for the research to be collated and summarised.

Results: After the searching and screening process, 8 studies remained and were included in the review. The following chronic diseases were focused on in the studies: chronic refractory cough (CRC), non-Hodgkin lymphoma (NHL), non-fatty liver disease (NAFLD and IR), dysglycemia and common mental disorder (CMD). Four of the studies found a positive relationship between processed meat consumption and chronic diseases, two found no association, and two had inconclusive results.

Conclusions: However, the small sample size has meant that clear conclusions on the topic cannot be drawn. Overall, more primary studies must be conducted on the topic in order to completely understand whether there is a relationship between increased intake of processed meat consumption and risk of chronic diseases.

Keywords: Processed meat, Consumption, Chronic diseases, High income countries (HICs), Middle East and North Africa (MENA), Scoping review

Abstract

Background: Innovative technologies can be used as a source for delivering health related interventions. The internet has been used for delivering such interventions due to its capability in reaching large audiences and by eliminating geographical and physical barriers. This study aimed to review the use of social media online weight management interventions.

Methods: A systematic review, exploring the effectiveness of social media for delivering the online weight management intervention was conducted. Randomised Controlled Trials between 2000 to 2021 were considered for inclusion.

Results: Five studies were identified for analysis covering subject areas related to physical, behavioural, psychological, and dietary activities. In addition, the selected studies were heterogeneous in context to area, target audience as well as mode of delivery. Facebook was used in every study for delivering intervention.

Conclusions: The systematic review of study demonstrated that the Facebook was the sole method of delivering the online weight management intervention due to its capability to reach and access a large audience. Moreover, participants who use online weight management programs for more than one year saw a change in behaviour. However, the randomised control trails were not considered adequate and efficient methods for assessing the efficacy of online weight management intervention through social media.

Keywords: Online weight management intervention, Facebook, Social media, Randomised controlled trials (RCT), Physical change, Behaviour change

Chloe Smith

A qualitative study exploring the Influence of Instagram on 18–34-year-olds body image during the COVID-19 lockdown

Abstract

Background: The COVID-19 pandemic has had adverse effects on mental health, physical exercise, and dietary habits. During the COVID-19 lockdown, time indoors and time spend on social media increased which caused a societal trepidation of weight gain. On the social media site Instagram, diet culture content (alluding to a fear of weight gain and pressure to lose weight) increased, reflecting and reinforcing this fear of weight gain as well as the notion that it is undesirable to gain weight. This content created online comparison, with users comparing themselves and their bodies to others, prompting changes to eating habits to achieve the 'ideal body'. The distribution of such messages may have led to an increased focus on body-image, which has a myriad of associated health harms, including body-dissatisfaction, mental illness and eating disorders.

Methods: This qualitative research explores factors leading to Instagram users being influenced by diet culture during the COVID-19 lockdown. Preliminary analysis of Instagram content provided an initial understanding of diet culture messaging on Instagram shared during the lockdown. Diet culture related posts were scraped and coded to identify the most commonly discussed topics. Posts holding a strong diet culture message were also selected for photo elicitation during the interviews. Interviews were conducted with a purposive sample of male and female 18-34 year olds who use Instagram. Data were analysed thematically and provided in-depth insight into participant's views, knowledge, reflections and experiences.

Results: The study found that diet culture on Instagram is omnipresent and gendered in the ideals that are presented. In terms of the socio-ecological model, several factors influenced body-image and eating behaviours at the individual, interpersonal and community level. Home-workouts and comparisons were the most significant factors discussed, with both prompting body-dissatisfaction. The use of emojis, in particular the pig emoji, were seen as stigmatising. Peer endorsement reinforced diet culture messaging through comparison with friends who liked diet culture related posts. Several factors were seen as protective against diet culture rhetoric including body positivity posts and awareness that Instagram is not always a representation of reality. Other factors were identified as having both positive and negative influences on body-image and eating behaviours such as the use of humour and individual mind-set.

Conclusions: The study found that diet culture on Instagram is omnipresent and negatively impacts body-image and weight-related behaviours, particularly among those with pre-existing mental health issues and body concerns. Recommendations based on the study findings include disseminating accessible information in a variety of mediums (including social media influencers) that counteracts diet culture rhetoric, increases body positivity, and raises critical media literacy among users. Environmental responses are also needed including stricter regulation and trigger warnings for body image related content and advertisements by Instagram. Future studies should address how diet culture influences Instagram users of different ages -in particular those aged under 18 years, who may not have the same level of media literacy as older users.

Keywords: Body image, Diet, Eating, Diet culture, Social media, Instagram

Katie Steele

Factors and characteristics associated with soft skin and tissue infections and injuries among men who inject image-and performance enhancing drugs: A secondary data analysis

Abstract

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Background: The increasing use of image-and performance enhancing drugs (IPEDs) in the UK is a significant public health concern. Those who inject IPEDs are at risk of skin and soft tissue infections (SSTIs) and may experience symptoms such as redness and abscesses at an injecting site. However, most of the research is focused on risk factors associated with experiencing symptoms of SSTIs in those who inject psychoactive substances. The aim of this study was to determine which characteristics and risk factors are associated with experiencing redness and abscesses in those who inject IPEDs, in order to add to existing literature.

Methods: This is a secondary data analysis on data collected for the National IPED Info Survey 2016. Of all participants who completed the survey, 562 men who injected IPEDs were included in this analysis. Risk factors which had been found to be associated with SSTIs in earlier literature were entered into a cross tabulation. Those which were significant ($p < 0.05$) were entered into a bivariate regression analysis to produce the unadjusted odds ratio. These variables were then entered into a multivariate analysis to obtain the adjusted odds ratio.

Results: A total of 308 participants reported ever experiencing redness at an injection site, and 67 reported ever experiencing an abscess at an injection site. Results from the multivariate analysis found that experiencing redness at an injection site was associated with having ever taken a growth hormone, having ever shared a multi-dose vial, re-using own needles/equipment and having ever thought that IPEDs were fake. Similarly, reporting an abscess was found to be associated with having ever taken a growth hormone, shared a multi-dose vial and re-using own needles and syringes.

Conclusions: Symptoms associated with skin and soft tissue infections are common amongst people who inject IPEDs. However, there are still a high number who don't access any healthcare services due to stigma and associated barriers. In order for health to be improved amongst those who inject IPEDs, interventions need to have increased accessibility and healthcare services need to provide a greater understanding of user's attitudes and motivations.

Keywords: Image and performance enhancing drugs, Skin and soft tissue infections, Risk factors, Needle and syringe programmes, People who inject drugs, Skin injury

Katie Taylor

Exploring the impact of national changes in public health policy on service delivery for people who require drug treatment in Liverpool: A qualitative research study

Abstract

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Background: Since 2010 there have been major changes in the objectives of UK drug policy, and how drug treatment services in England have been commissioned and funded. Liverpool in North West England has more than twice the national average of both the rate of people receiving drug treatment services (9.6/1000 vs 4.4) and deaths from drug use (11/100,000 vs 4.7). This study investigates how changes in public health policy have impacted on service delivery for people who require drug treatment in Liverpool.

Methods: Six semi structured interviews were undertaken with professionals working within the drug treatment field in Liverpool. Interviews explored the changes to drug service provision, how changes in funding and UK drug policy have impacted upon service provision and current challenges which are seen by professionals working with people who use drugs. The use of qualitative methods enabled the researcher to consider first-hand experience and views of professionals directly involved in service delivery, which is a gap in current research. Data from the interviews was thematically analysed using inductive and deductive approaches into 7 key overarching themes.

Results: The interviews show the main challenges which are being faced by both local commissioners and treatment providers in relation to drug treatment service provision in Liverpool. High treatment thresholds, high caseloads, and complexity in relation to people with multiple comorbidities which is also made more challenging due to the disconnect between drug services and other parts of the system such as mental health service provision. The changing need in relation to young adult's drug use and service provision to meet this need was highlighted by the participants. For example, provision of advice and intervention for people who use drugs other than opioids and cocaine. Participants highlighted a lack of set training standards and opportunities for professional development within the field with this leading to some participants feeling devalued. A lack of ongoing funding for services were raised as a risk, with participants highlighting the issues with short term funding for projects and pilots which reduce opportunities for innovation and service growth. Participants felt that the implications of these challenges are reduced opportunity for intervention at an early stage resulting in potentially poorer outcomes for the person.

Conclusions: The need for a whole system integrated approach to care for people who use drugs was considered the key to reducing risk and providing improved outcomes.

Keywords: Drug treatment, Recovery, Commissioning, Austerity, Drug policy complexity

Annemarie Wilson

The impact of the Euro 2020 Football championships on domestic violence in the UK - a content analysis of print media

Abstract

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Background: This research aims to review print media related to domestic violence and the contributing role sporting events have in increasing the prevalence of this form of violence. The scope of this work focuses on sporting events worldwide with particular emphasis on football tournaments at both club and national levels.

Methods: In order to identify if a rise in domestic violence occurs during sporting events, this study focuses on the Euros 2020 football tournament in the United Kingdom, over a four-week period from the 11th June to 11th July 2021. Analysis of 15 online British newspaper articles was conducted to gain insight and information of the problem and scale of domestic violence and its links to football. Articles were found using the terms 'domestic violence' and 'Euro 2020' 'football' and were selected using the Factiva database.

Results: Key themes were identified 1) Alcohol, 2) Weather, and 3) Masculinity, which were all reported to contribute to a climate in which domestic violence incidents could rise.

Conclusions: The relationship between sport and domestic violence is an emerging theme for researchers, academics, and practitioners within the field of violence. As shown through evidence and theoretical frameworks, men's perpetration of domestic violence appears to have a root cause of alcohol, and toxic masculinity. Although the research suggests an increase of domestic violence around certain sports and sporting events i.e., football, one cannot generalise the association to all sports, spectators and athletes. Thus, future research is needed to explore the context in which sport related violence is portrayed within the media

Keywords: Media, Euro 2020, Football, Violence against women and girls, Domestic violence, Masculinity, Alcohol

Do free-to-play sports gambling predictor games influence online sports betting behaviours for men in the UK

Abstract

Background: Globally, gambling is increasingly being identified as a public health concern, associated with poorer health and well-being. Research has characterised gambling inducements as increasing riskier gambling behaviours and having links to problem gambling. However, no prior research has examined sports gambling predictor games whereby monetary prizes can be won by making free predictions on sporting events. This study aimed to describe associations between playing predictor games and riskier online sports betting behaviours, problem gambling, and between intensity of playing predictor games and problem gambling.

Methods: An online survey using a convenience sample was completed by males aged 18+ years, living in the United Kingdom who had participated in any gambling activity in the last year (n=384). The survey asked questions about sociodemographics, gambling behaviours, and predictor game playing behaviours. The Problem Gambling Severity Index (PGSI) tool was used to determine existence and severity of at-risk and problem gambling. Bivariate analyses were undertaken using chi-squared and multivariate analyses using binary logistic regressions, controlling for sociodemographics.

Results: Overall, 45.8% (n=176) of all participants played predictor games. In multivariate analyses, predictor game playing was more likely among younger males compared to older (AOR 2.38, p0.017), those with problem gambling compared to non-problem gambling (AOR 6.92,p<0.001), higher frequency of online sports gambling compared to low (AOR 3.21,p<0.001), higher frequency of in-play betting compared to never placing in-play bets (AOR 3.9,p0.004), medium monthly gambling expenditure compared to low (AOR 2.16,p0.003). Playing predictor games was also associated with a greater mean number of gambling activities (M=5.79, SD=3.30) compared to not playing predictor games (M=3.81, SD=2.45, p<0.001). There was a moderate strength, positive correlation between intensity of playing predictor games and PGSI score (r=0.41).

Conclusions: This study suggests there may be links between playing predictor games and gambling harms, particularly amongst already vulnerable groups (younger males, and those with problem gambling). Policy options which limit access to the most harmful inducements – one of which being predictor games, must be considered to protect against gambling harms.

Keywords: Gambling, Problem gambling, Inducements, Predictor games

Elizabeth Wilson

What factors affect childhood obesity in deprived areas, in children aged 5-16 years old? A qualitative systematic review

Abstract

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Background: Obesity in childhood is a significant issue for public health and costs the NHS an estimated £6.1 billion per year to treat the conditions associated with obesity (DOHSC, 2020). This review highlights the impact of deprivation on obesity levels. It discusses how deprivation can affect exercise and diet in families and children. It also discusses the various stakeholders required to increase success of obesity interventions, and how its impact can contribute to tackling the causes.

Methods: This research is a systematic review of qualitative studies using a narrative approach. The PEO framework was used to develop a suitable question for the review. Searches were then conducted using grey literature and the following databases: PubMed, Web of Science, CINAHL, Medline and PsychInfo. All studies were imported to Endnote for duplicate removal, title and abstract screening, and full text screening. This eliminated studies that did not fit the inclusion criteria. Those studies that passed the criteria checks (N=4) were hand coded, line by line, to identify descriptive and analytical themes and sub-themes.

Results: Five key themes were identified from the analysis. These were common understanding of health behaviour, values, services, and congruence, lead responsibility, influencing factors and reluctance in behaviour change.

Conclusions: This review aimed to collect data on obesity levels in deprived areas. The data found the need for early intervention in schools for both parents and children to assist with development of healthy social norms. It was found that supermarkets need to provide sufficient levels of nutritional food at a reasonable price and food deserts are something to be addressed. The high density of fast-food restaurants needs to be considered by Local Authorities, especially those in lower income communities. Implementations need to be targeted at ethnic minority groups as well as areas of deprivation, with a more tailored approach to interventions.

Keywords: Child, Qualitative, Obesity, Deprivation, Systematic review

Yichi Zhang

Exploring LJMU students' perceptions of the impact of social media on body image

Abstract

Background: Body image is a person's perceptions and attitude about one's own physical appearance. Body image can play a role in influencing our physical health and mental health. This study aimed to explore LJMU students' perceptions of whether social media use has had an impact on their body image.

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Methods: An exploratory quantitative study was conducted using an online questionnaire delivered to the Faculty of Health email lists through social media. A total of 185 participants completed the online survey.

Results: The main findings of this study revealed that 43.8% of the participants had negative and very negative feelings about their body image, while the rate of positive and very positive was 20.5%. The majority of the participants (84.8%) claimed that they usually spend 1-6 hours daily on social media. Participants aged from 18-21 years reported the highest percentage (56.8%) for using social media from 4-6 hours per day. Students aged 26 years or older received the lowest (18.1%) for using 4-6 hour and the highest (62.9%) for 1-3 hours on social media. Female participants were more likely to be affected by the impacts of social media and received higher percentages for the three options of very influential (24.2%), somewhat influential (36.2%) and slightly influential (30.2%). 53% of the participants claimed that they have attempted to use a diet from social media to lose weight, compared to 47% of them chose never. Factors that were associated with participants' attitude towards body image include gender and current level of study. Factors that were associated with the impact of social media on body image include gender and whether they used a diet from social media to lose weight.

Conclusions: Overall, the study provided an overview of research on social media and body image. The study also identified some implications that should be taken into account for future research including the need for raising students' awareness of supporting positive body image and good wellbeing. Helping university students to appreciate their bodies through various ways can be critical to future public health research.

Keywords: Body image, Social media, Impact, Perception, Attitude, LJMU Students, Gender, Age groups, Level of study, Mental health, Physical health