SCPHRP
Scottish Collaboration for
Public Health Research and Policy

SUMMER MAGAZINE 2016

ENTER

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Introduction to our new e-book

Note from the Editor: This edition of the magazine is the first that we have presented as an interactive e-book. This format allows us to present our content in a – hopefully – more engaging way. It also provides us with the tools to bring you more content through the use of embedded videos and hyperlinks. Wherever you see the symbol ⏩ (demonstrated by the ladies in the photo) you can click to access additional content. If you have any feedback, we'd be very grateful if you could send it to Sam at samantha.bain@ed.ac.uk

Image Courtesy of Lothian Health Services Archive, Edinburgh University Library.

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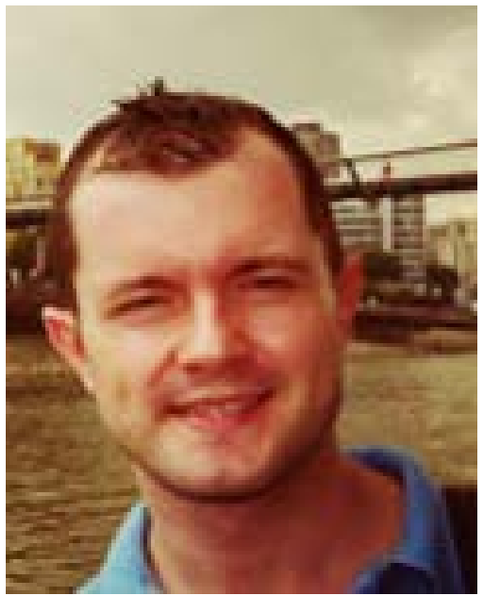
EDITOR



NOTE FROM EDITOR

Welcome to this latest issue of the SCPHRP magazine. We hope you've gotten some good weather over the Summer months. Here in Edinburgh, our umbrellas have never been far from our side!

We were delighted to welcome two new staff members in July: Greig Inglis (Research Fellow and Lead for our Adult Life/Working Age programme) and Louise Marryat (FARR Research Fellow). I am sure you'll hear more about them both in the coming months.

This issue of our magazine includes articles reflecting the diversity of projects and work underway at SCPHRP, including our Wellcome Trust funded project exploring community food initiatives and mental health, and our funded video series "The Evidence Exercise". John Frank, our Director, tells us about his

recently published book '"Disease Prevention: A Critical Toolkit'", of which he is Lead Author, alongside Ruth Jepson and Andrew Williams. Scott Burton from the Falkirk Community Trust, and Eebbaa Elfneh, who joined us for his High School work experience placement in July have contributed articles - both with a physical activity slant. Additionally, you will find reflections on recent conferences attended by members of our Team.

Finally, we are delighted to include an article by the group of MPH students (Stand Up For Health) considered to give the most engaging and comprehensive presentation as part of our course in developing and evaluating complex public health interventions. Well done to all!

John McAteer,
Working Groups - Team Manager

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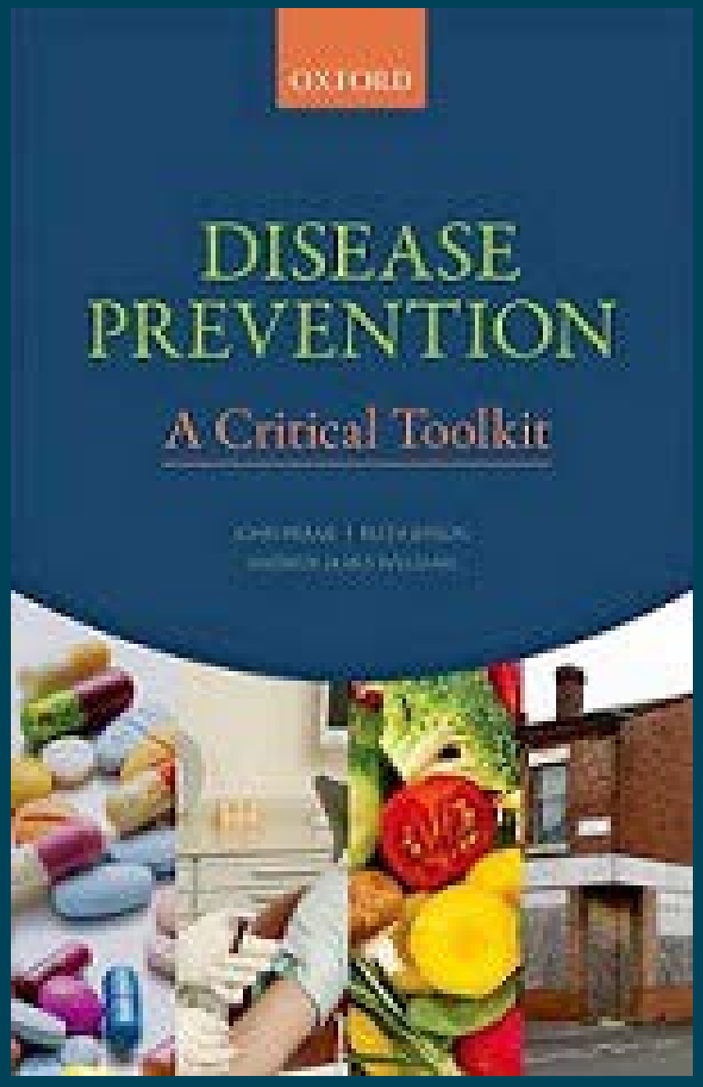
Disease Prevention: A Critical Toolkit

John Frank tells us about his new book, of which he is Lead Author alongside Ruth Jepson and Andrew Williams



Everyone knows that a new controversy about "how to stay well" hits the media at least once a week. In recent years, examples include: claims made for "healthy foods;" proposed policies to tackle the obesity pandemic; the benefits versus risks of long-term statins in healthy persons; or the value of prostate cancer screening. Notably, the most common controversies of this kind are about prevention: undergoing some medical or lifestyle intervention now, for promised health benefits later, in the long run. The bottom line is pretty much the same: the controversy is scientifically complicated, with medical experts taking both sides. We wrote this book to help the average health professional and lay person critically assess claims made for

the effectiveness of preventive medical and public health interventions, in terms of the scientific evidence behind them.

Epidemiology – the quantitative study of who becomes ill, who does not, why, and what can be done about it – is a tool for evaluating the worth of prevention. This book teaches the reader how to apply epidemiological and related methods for critiquing prevention, using recent controversies (including those listed above) as worked examples. It does not assume any prior study of epidemiology or statistics. Those with prior basic training in these disciplines will find much that is new – and hopefully useful to them. Teachers of senior undergraduates in medicine and nursing may find the book especially useful as a supporting text for teaching "Critical Appraisal", a standard curricular component nowadays.

Above all, we have written this book to help future generations of health professionals, in both clinical and public health work, defend their patients and local populations from potentially harmful or resource-inefficient proposals for new preventive interventions. We believe it is within the capability of every health professional, as well as an ethical priority for them, to master the techniques we teach in this volume. We therefore dedicate the book to those who would like to be more critical, and scientifically informed, about the sorts of ubiquitous prevention claims which the media continue to cover – unfortunately usually uncritically – every day.

TO FIND OUT MORE, PLEASE CLICK *HERE*

Funding opportunity for policy/ practice members of SCPHRP

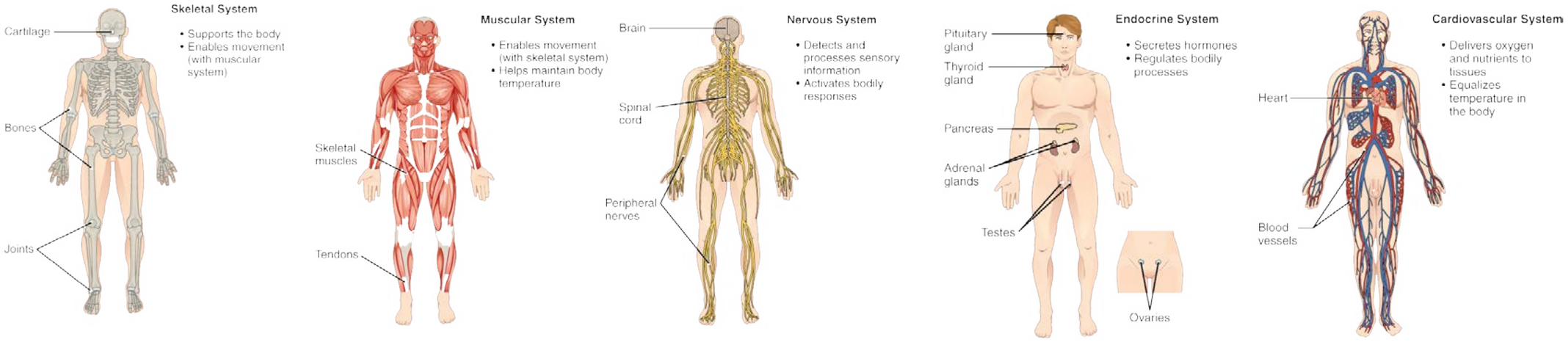
Do you work in a national/local government policy or NHS setting related to public health, or a public health related third sector organisation? Are you a registered member of SCPHRP? If the answer to these questions is yes, then you are eligible to apply for our Development Award scheme.

The scheme is part of our ongoing commitment to enhance the capacity of the Scottish public health workforce to contribute to, and use research, via appropriate career development opportunities. Applicants can apply for funding for a number of career development activities, including:

- Attendance at a relevant conference, including registration, travel and accommodation costs.
- Attendance at a relevant seminar/workshop, including registration, travel and accommodation costs.
- Further education opportunities, including relevant modules/courses.
- Travel to meet with a key figure in a related field, where such a meeting is likely to benefit your work.

Applications are accepted throughout the year, until all available monies are allocated. To register as a member of SCPHRP, please visit: *http://www.scphrp.ac.uk/join-a-working-group/* and contact the relevant Fellow for further information.

Physiological development & implications for health in adolescence



Adolescence is a time in which substantial physiological changes are occurring in parallel with changing environments and opportunities. It is important to understand how the development of physiological systems (e.g. the brain & nervous system) during this period can impact on health behaviour development. This can be used to inform health improvement policy and practice.

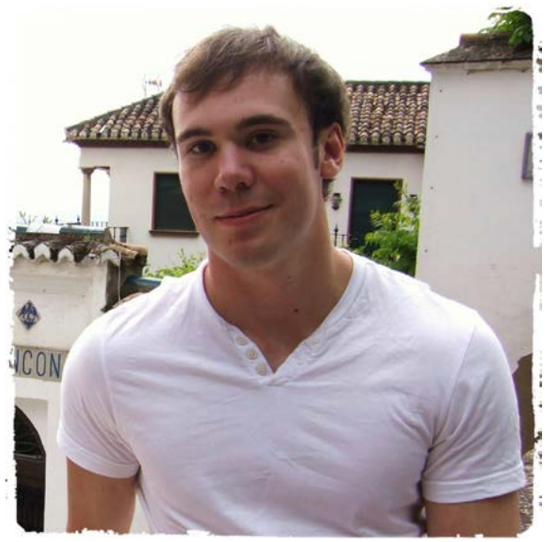
Over the past year and a half, SCPHRP and NHS Health Scotland have been conducting a systematic review of the evidence in this area. We are due to publish our report in the Autumn 2016- including implications for research, policy and practice. We will also be planning a series of dissemination events for a variety of audiences later in the year.

This piece of work is the first phase of a much wider piece of work that aims to identify and understand the range of factors influencing health behaviour development and change during adolescence, including psychological, social and environmental factors.

For further information please contact John McAteer or Jan Pringle (john.mcateer@ed.ac.uk; jan.pringle@ed.ac.uk). You can read more about the review here: https://systematicreviewsjournal.biomedcentral.com/articles/10.1186/s13643-015-0173-5

The Evidence Exercise: A Video Series

by Renee Ingram & Stephen Malden



Last year, we received an Innovation Initiative Grant from the University of Edinburgh to create a short video series related to the NHS' recommended physical activity guidelines for adults in the UK. The series aims to briefly describe how different types of physical activity impact upon various aspects of our health.

We first focus on the cardiovascular system and how physical activity, in particular aerobic exercise affects the heart and blood vessels. We then focus on the skeletal system and how specific types of physical activity can help ensure that our bones stay strong and healthy as we age. Finally, we talk about the neuromuscular system and cover the different ways in which specific forms of physical activity can improve our strength, balance and potential to lose weight.

Throughout the video series, we draw upon scientific evidence which demonstrates the benefits of physical activity, or highlights the dangers of a sedentary lifestyle. We briefly discuss the role that diet and nutrition play in maintaining health and wellbeing, and talk about the pros and cons of specific diets (such as gluten-free, vegetarian) with a dietician. We also give examples of everyday activities that can be used to maintain physical activity levels, and hopefully demonstrate that staying physically active is easier than people think.

Most people know that physical activity is good for them. We hope this short video series describes WHY physical activity is good for us, and specifically how different types of activity is beneficial.

We hope you enjoy watching.

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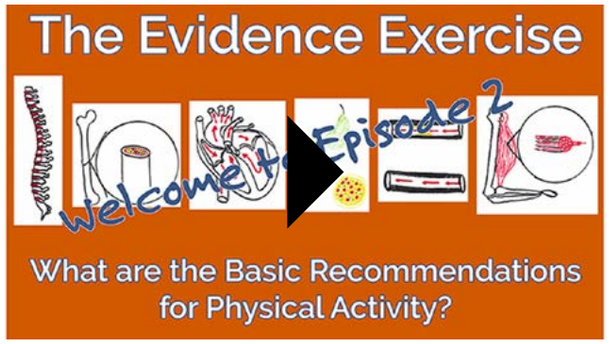
The Evidence Exercise



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THE GRAPHIC MEDICINE CONFERENCE JULY 2016

BY SAM BAIN

In July, I attended the Graphic Medicine conference at the University of Dundee. Graphic Medicine explores the interaction between the discourse of health and the medium of comics. The theme for this year's conference was 'From Private Lives to Public Health' which aimed to highlight the relationship between comics, personal health narratives, and public health issues such as barriers to healthcare and the stigma of illness.

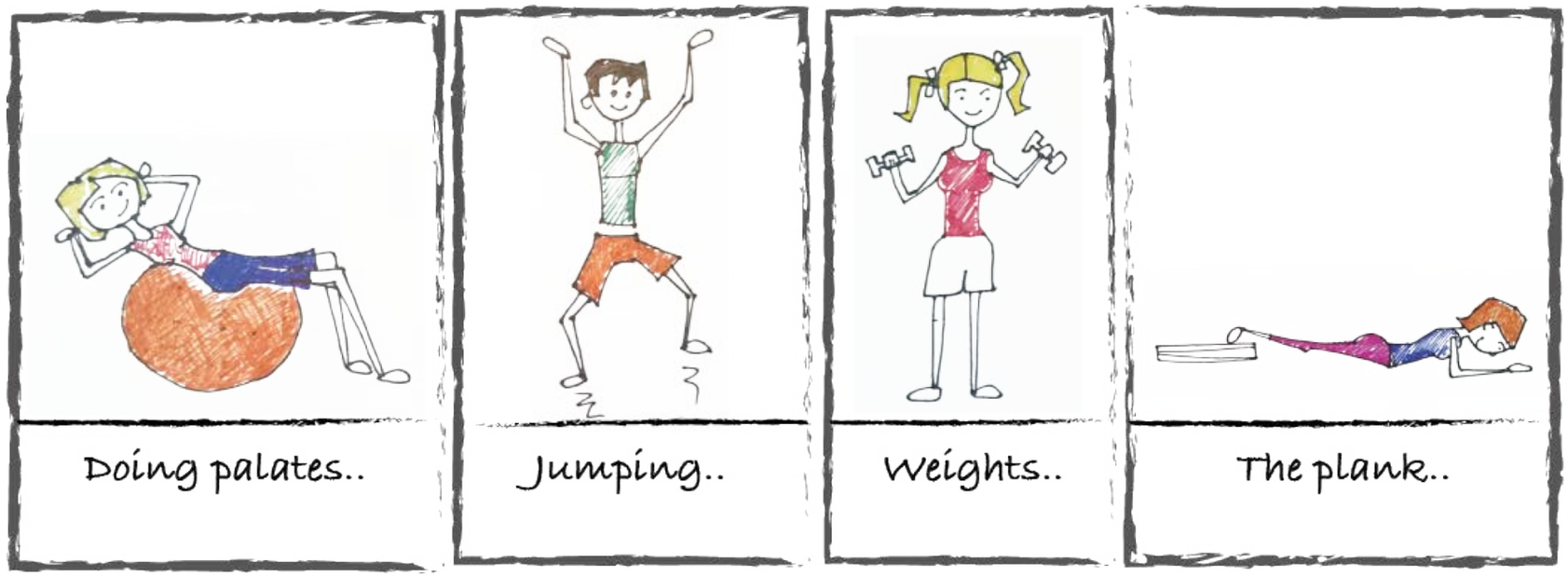
I am very interested in exploring what role comics might play in the prevention of illness and improvement of health, and whether we might be able to use this medium in our work at SCPHRP'.

Following the conference, my head has been buzzing with ideas. We have begun with some cartoons for our *Evidence Exercise video series*. Jane Hartley and I are also planning to design a comic book for use in disseminating findings related to our recently developed *parenting intervention (CARE).*

"Over the past decade this underrated medium has begun to receive recognition and acclaim from literary critics, academics, and broadsheet reviewers. This renaissance is partly due to the rise in popularity of the graphic novel. In contrast to production line, genre based, mainstream comics, graphic novels are full length, square bound "serious" comic books, aimed at adults, usually written and illustrated by one person, thus encapsulating the style, narrative and subjective worldview of an individual. Often drawing on direct experience, the author builds a world into which the reader is drawn"

Dr Ian Williams Comics artist and physician, Editor of Graphic Medicine.

It has long been known that comics are "not just for kids".



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Alison Rennie

We would like to congratulate Alison Rennie for obtaining a first class honours degree in Public Health from the University of Sunderland.
Alison spent some time at SCPHRP last winter, working with Daryll Archibald on a project related to green gyms and physical activity.

Well done Alison!!

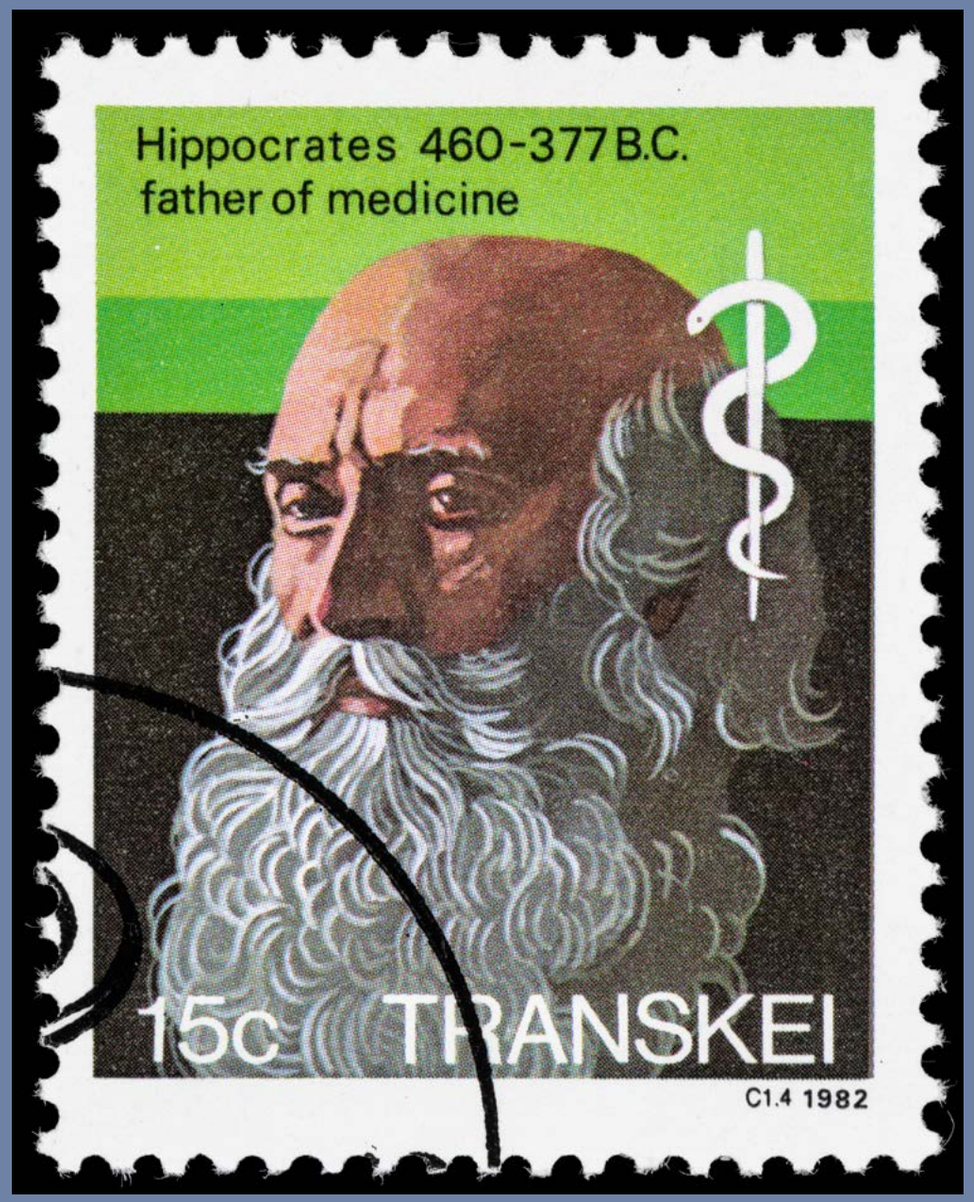
Work experience at SCPHRP

My name is Eebbaa Elfneh and I'm a year 12 student at LaSwap Sixth in Camden, North London. I was lucky enough to spend two days at the beginning of the summer holiday getting some work experience at SCPHRP.

My time in Edinburgh was short and sweet, but I learned important skills in research and got some firsthand experience of office life. Thanks especially to John McAteer, who introduced me to SCPHRP, and showed me how to access sources through the university databases, and Sam Bain, for tips on writing my article. Thanks also to the SCPHRP team for being so welcoming.

Here is my article - hope you enjoy.

Physical activity for health: What can history tell us? by Eebbaa Elfneh



With the technological advances humans have enjoyed over the past few millennia, physical activity, like many things, has become much less of necessity, and more of a pastime. Exercise lower the risks of coronary heart disease and strokes as well as a range of cancers and type 2 diabetes. So why is it that despite the benefits, only 67% of men and 58% of women in Scotland meet the government-set physical activity guidelines?

As with many social issues, it can be helpful to look to history to see if any lessons can be learned. Indeed, the first to prescribe physical activity to improve the wellbeing of his patients was the Ancient Indian physician Susruta in c600 BCE and the first to prescribe it for a diagnosed medical condition was the Greek Hippocrates, the 'Father of Western Medicine' and whose name the Hippocratic Oath stems from, in c460 BCE.

During the Neolithic Revolution (the transition some 10-12,000 years ago from human's foraging food to the domestication of plants and animals) physical fitness was necessary to survive. Skip forward a few thousand years and food production became less of an active activity, due to the invention of more complex tools. Indeed, we now exert some 800 fewer calories than early Homo sapiens .

The free time enjoyed by privileged members of society led to the introduction of sport into popular culture. Sport was introduced as a celebration of the human body, the most well-known example being the Olympic Games in Ancient Greece. Indeed, the Greeks were amongst the first to note the health benefits of exercise. Hippocrates introduced exercise into conventional medicine, declaring; 'eating alone will not keep a man well; he must also take exercise. For food and exercise work together to produce heath'.

The Ancient Greeks in certain cases however, used physical activity for a less noble pursuit; the art of warfare. In Sparta, young boys from the age of 7 were enrolled into the 'agoge', an intensive military training scheme in order to prepare themselves for a lifetime of military service. The emphasis of physical activity for the purpose of military benefit has continued into the 20th century. Britain's poor national health was made obvious during the Boer War where one in three volunteers were turned away for medical reasons.

Physical activity has been an integral part of human life for thousands of years, influencing the ways in which we compete, interact, and function both as individuals and a society. Recent policy and interventions go some way towards changing the way we perceive physical activity- from an inconvenience to a fundamental part of human existence.

Townsend N, Wickramasinghe K, Williams J, Bhatnagar P, Rayner M (2015). Physical Activity Statistics 2015. British Heart Foundation: London.

Cordain L, Gotshall RW, Eaton SB. Evolutionary aspects of exercise. WorldRev Nutr Diet. 1997;81:49–60

Food related activities and mental health:

Project update

A few years back, SCPHRP was funded by NHS Health Scotland to interview managers of mental health centres about programmes and activities offered in relation to food, e.g. gardening, cooking, communal meals, etc. The interviews explored the impact of such activities upon service users' mental health.

Following from this, we were funded by Wellcome Trust to build a logic model and developing a theory of change around why food related activities may impact upon mental health. We have conducted 20 in-depth interviews with service users from a community-based mental health charity in Edinburgh, including mental health and wellbeing.

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Through this work we've been able to show that learning new skills (like cooking or gardening) and being able to use those skills to help oneself and others is an important way to build confidence, self-esteem, and independence. The opportunity to learn and interact in an environment that feels safe (like a community-based mental health centre) is also key in order to engage people who are vulnerable.

In July, we presented our preliminary results of this study at the UKCRC 2016 conference in Norwich, England. We also convened a steering group of practitioners and academics to help begin the process of translating our logic model and theory of change into a tangible intervention framework.

In the meantime we've received an Innovation Initiative Grant from the University of Edinburgh to purchase cookers and other kitchen equipment that will allow for some early-phase testing and refining of intervention activities in our partnering community-based mental health centre.

Stay tuned for further updates on this innovative and exciting project throughout the coming year!

For further information, please contact Stephen Malden at *stephen.malden@ed.ac.uk*

Late life update by Daryll Archibald

Daryll travelled to Australia in June to attend two international conferences and present work on different aspects of his Green Gym collaboration with The Conservation Volunteers (TCV).

His first stop was the International Federation on Ageing (IFA) 13th Global Conference in a wonderfully warm and sunny Brisbane. The conference had two central themes: Disasters in an Ageing World and Age Friendly Cities and Communities. Daryll contributed to the latter theme and focused his talk on the potential of TCV Green Gyms to promote the uptake of environmental volunteering opportunities for older people living in socio-economically disadvantaged areas.

Following Brisbane, Daryll moved on to the cooler climes of Melbourne to attend the 9th World Congress of Active Ageing (WCAA) organised by the Institute of Sport, Exercise and Active Living (ISEAL), Victoria University. His talk at the WCAA featured in a well-attended session on 'Active Ageing in the Community' and focused on the components of TCV's Green Gym programme such as raised beds for growing fruit and vegetables that can facilitate community active ageing for older people of all physical capabilities.

There were many great things about both conferences: the weather in Brisbane and its vibrant Southbank area, and the chance to meet and present alongside some of the world's leading age friendly cities/ communities experts. In Melbourne, a particular highlight was Gil Penalosa's fantastic opening plenary on the importance of parks and why cities should be designed to be great for all. Melbourne also made a big impression with its brilliant parks, museums and passion for Aussie Rules Football – Daryll's favourite new sport!

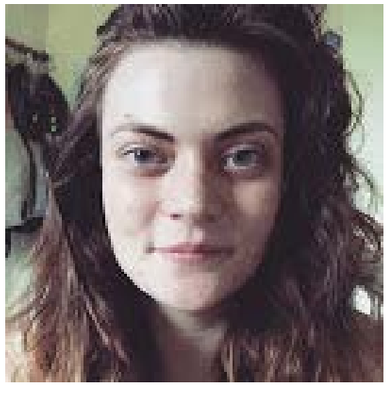
Daryll would like to thank both SCPHRP and the Usher Institute of Population Health Sciences and Informatics at the University of Edinburgh for the funding to attend both of these amazing conferences!

STAND UP FOR HEALTH: An Intervention to Reduce Sedentary Behaviour in Call Centres

Laura Tirman, Florence Ashdown, Ruth Miller, Audrey Buelo, Christina Katan, Isis Guerrero Castillo





WE are a group of students, who attended SCPHRP's developing and evaluating complex public health interventions course as part of our MPH degree. The course required students to develop an intervention proposal for their final assignment. Each group was required to present their work as part of a friendly class-wide competition. This year, our group - Stand Up for Health - was selected as the winner.

Stand Up for Health aims to reduce sedentary behaviour in call centres, where workers are especially prone to long sitting times. Recent studies have demonstrated that sedentary behaviour is a serious health concern. Reducing sedentary behaviour can potentially reduce

the incidence and prevalence of chronic diseases, as well as promote a healthier workplace environment. Developed using the **6SQUID framework,** Stand Up for Health targets individual, social/community, environmental, and organisational factors. Prior to designing intervention activities, our group identified the factors influencing sedentary behaviour in office settings, and those that have the greatest scope for change. These were lack of knowledge regarding the risks of sedentary behaviour, feeling little control over workplace health, and being in a workplace environment that fosters prolonged sitting. To address these factors, Stand Up for Health includes a variety of components to foster a supportive standing environment. These include provision of standing desks, wireless headsets, educational sessions, friendly competitions, pledges, and rewards to encourage standing. To encourage participation among stakeholders, Stand Up for Health involves both the managers and the employees in the development and delivery of the intervention.

This assignment was a great opportunity for our group to fully engage with class material and put it into real world practice. We learned the intricacies of complex intervention development, and the amount of work required. Working in a large and diverse group brought many different perspectives to the table, and it was a useful opportunity to collaborate in a setting similar to that which many of us intend to work in as part of our public health careers.

Members of the team are applying for grants to pilot this intervention in the UK and Mexico. Having the chance to develop a project from coursework into a real world setting was an exciting opportunity, and we are hopeful for the future of our intervention.

Well!bingo is a project run by the University of Stirling and funded by the Cheif Scientist Office (CSO). The project was set up to encourage a healthy lifestyle among ladies who play bingo.The intervention is designed on the views and thoughts of women who regularly attend bingo, as well as taking the wider bingo environment (such as business, cultural and social aspects) into account. Well!Bingo aims to use enjoyment and social opportunities as a stepping stone to encourage health behaviour change. ***You can read more about Well!Bingo*** *here*

And you can watch the video below.

Active Forth: An exercise referral scheme

Scott Burton, Physical Activity Referral Consultant,

Falkirk Community Trust

Active Forth is an exercise referral scheme within Falkirk Community Trust which has been operating in the area for over 10 years. It is run at four health and fitness clubs across Falkirk: Grangemouth, Stenhousemuir, Camelon and Bo'ness. Active Forth aims to enable members of the community to exercise and take control of their health by providing them with opportunities to take part in healthy activities. We gain referrals from GPs, physiotherapists and, more recently, mental health professionals. We offer one-to-one supervised sessions in the gym from personally tailored programs consisting of low-impact strength and balance classes, to aqua-aerobics and group supervised sessions, ensuring that every member can exercise safely and effectively. In 2016 the most common referrals have been in relation to chronic back pain, arthritis, cardiac rehabilitation, type 2 diabetes and post-surgical/injury rehabilitation.

The National Institute of Health and Clinical Excellence (NICE) have called for more controlled research on the effectiveness of exercise referral schemes (Pavey, 2011). Active Forth Instructors have begun gathering data to determine how exercise impacts upon health and well-being over a 12 week referral program. Our primary aim is to determine if overall quality of life improves as a result of participating in the program, and at what stage it becomes significant. A Likert scale questionnaire created by the European Organisation for Research and Treatment of Cancer (EORTC QLQ-C30) is used to measure and determine changes in quality of life. It measures global health status, five functional scales and quality of life. Participants are asked to complete the questionnaire at weeks 1, 4, 8 and 12. It is hoped that the data gathered will also help to determine how many times on average a person needs to attend sessions over the 12 weeks to make a significant improvement to their particular condition.

By means of follow-up, after Active Forth participants have completed the programme, they will be invited to take part in a focus group at a later date, to determine any lasting effects. . A benefit of the programme being run across 4 clubs is that different geographical areas can be investigated to determine changes in their exercise habits. Participants who do not successfully complete the programme will also be invited to attend a focus group to investigate their reasons for non-completion. Preliminary tests have shown that perceived quality of life and global health status do improve over a 12 week referral program (<0.05).

As well as allowing us to determine the effectiveness of our programme, it is hoped that this research will inform future practice and be used as a resource to guide or improve exercise referral schemes across Scotland.

Contact

You can contact Scott for further information at

Falkirk Community Trust

t: 01324 503300

Reference

Pavey, P.G et al. 2011. Effect of exercise referral schemes in primary care on physical activity and improving health outcomes: systematic review and meta-analysis. British medical journal;343:d6462.

SCPHRPs best bits from Summer time

"Memories of summer 2016: Lots of rain, with intermittent glorious sunshine; Andy Murray and team GP going for glory...and succeeding in style!"

"HEARING OUR SON (VIOLIN) AND HIS PARTNER (CELLO) PLAYING IN THE AIX-EN-PROVENCE MUSIC FESTIVAL"!

‘Wandering through the Danube delta on a wee boat watching the kingfishers, cranes and pelicans.’

"My favourite memory from the summer is taking the train home from Norwich after UKCRC16, we were all so tired that we found everything hysterically funny."

"Taking my dad, who has dementia, out on a sunny day to a lake and watching the ducks whilst eating ice-cream".

"Nothing can hardly beat five grown men and women trying extremely hard to solve a newspaper’s crossword puzzles in a train after an inspiring conference in Norwich!"

"my favourite memory of the summer was seeing Sister Sledge play. I definitely left as a new fan!"

"Attending my sister’s wedding at Loch Lomond (without a drop of rain!); adding more umbrellas to my extensive collection"

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