UNIVERSITY OF WINCHESTER

Drug and Alcohol Problems: Translating Research into Policy, Education, and Practice

Volume 1 of 2

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Doctor of Philosophy by Works in the Public Domain

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This contextual statement has been completed as a requirement for a postgraduate research degree of the University of Winchester

Declaration

No portion of the work referred to in the Contextual statement has been submitted in support of an application for another degree or qualification of this or any other university or another institute of learning.

I confirm that this Contextual statement is entirely my own work

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ABSTRACT

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This contextual statement covers my early career as a healthcare practitioner and the moves that I have made into research and higher education roles and the subsequent published work. I have been concerned with the interplay between research, policy, and practice in the field of problem drug and alcohol use which is the primary goal of this PhD. The aim of this contextual statement is to demonstrate my contribution and impact from 11-published works in the public domain all within the overarching thread of drug and alcohol problems. The works presented here include opiate drug treatment outcomes; technical alcohol preventive policy development in workplaces; and the technology transfer of complex interventions to reduce alcohol consumption in hazardous drinking populations.

This document contains an autobiographical account of my work roles and an examination of the published works with regards to their contribution and impact. There is a chapter that contains a retrospective critique of research methods used in two research studies of the published works.

The impact and contribution of my published works are represented in other academic papers and reports that helped shape drug treatment policy during the period 2000 to 2004 for the prevention of drug-related deaths as a pragmatic approach to treatment programme development. The alcohol prevention policy development in the workplace has a different contribution and impact with regards to drug and alcohol policy both at the local, regional, national and international levels. The brief alcohol intervention and motivational interviewing published works have enabled me to move forward in further research in this area in a novel setting within the criminal justice system.

The submission demonstrates the development in my professional and academic roles that has established my reputation as a translator of research, practice, and education. It shows how I have become and continue to be an expert who is engaged to develop others in industry and government with regards to the prevention of problem alcohol and drug use in workplaces both at international and national levels. My unique experiences have enabled me to develop the skill of translating my specialist knowledge and understanding into policy, practice, and education.

Taken together the 11-public works and statement demonstrate the contribution to knowledge and practice development as well as impacts on government and organisational policies. Personally, it shows how I have developed my career starting over in professional nursing roles to becoming a teacher, thought leader and university academic. I will continue to build on my contribution to the field with my future publication and research plans.

Keywords: Drug-related death, health outcomes, heroin drug users, alcohol use, problem alcohol use, prevention policy, workplaces, motivational interviewing, brief intervention

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Chapter One: Introduction

In this context statement for my chapter, I present my professional profile by describing who I am, what health professional career pathway I have followed, and an overview of my published works set out in the subsequent chapters. I give an account of my professional working life from entering the workplace in 1978 to the present. This claim from my published works has the following themes: opiate drug treatment outcomes; technical policy development for alcohol prevention programmes in workplaces and the technology transfer of complex psychological interventions to reduce alcohol consumption. I have been concerned with the interplay between research, policy, and practice in the field of problem alcohol and drug use for 39 years.

Current Professional Roles

I am currently employed by two Universities in the South East of England. At the University of Winchester, I am a Senior Lecturer in the Inter-Professional Department at the Faculty of Education Health and Social Care. At the University of Surrey, I am a Teaching Fellow teaching on the pre-registration nursing programmes at undergraduate and post-graduate levels. At the University of Winchester, I teach on two undergraduate programmes. One of the undergraduate programmes has a focus on adults in health and social care, and the other on child and youth. I teach mental health and problem psychoactive substance use in both undergraduate programmes. I have been developing my research role at the University of Winchester. In this position, I have been recently developing research methods for ensuring fidelity of practitioners' motivational interviewing skills using a complex intervention for a randomised controlled study to reduce alcohol consumption using screening and identification (Gamblin *et al.,* 2017; Tobutt, 2015; 2017a; 2017b) and in novel criminal justice settings.

At the University of Surrey, I am concerned with the teaching and learning activities of pre-registration nursing students as well as on Continuing Professional and Personal Development nursing programmes (CPPD) for qualified registered nurses. I also train both groups' motivational interviewing skills. This also allows me to continue being a member of the global Motivational Interviewing Network of Trainers (MINT) that Bill Miller and Steve Rollnick (2013) had set up to promote Motivational Interviewing (MI) training at a yearly forum (Tobutt and Tripper, 2010).

Trainee Operating Department Assistant, Romford General Hospital (1978 to 1980)

I entered the British National Health Service system as a Trainee Operating Department Assistant (TODA) at Romford General Hospital. Training took two years to be completed. The Operating Department Assistant's (ODA) role was to help the anaesthetist in their work and within the operating theatre assisting setting a patient up for surgery and other procedures. It also involved 'scrubbing' for the surgeon in surgical operations (Mitchell and Veitch, 2000). The ODA was a new professional role replacing that of the established Theatre Technician, which in-turn has been re-named Operating Department Practitioner [ODP] (College of Operating Department Practitioners, 2008). Pharmaceutical psychoactive substances such as fentanyl (an opiate drug) were given to patients for pain control during surgery (Crown, 1998). However, the issue of non-medical opiate use was observed in patients that I saw in the operating department from their notes. This added to my curiosity and would help the development in my thinking and research on opiate drug users (Tobutt, *et al.,* 1997). Psychoactive substances change an individual's mood and behaviour and can be given for medical purposes as well as their illicit use for hedonistic purposes (World Health Organization, 1994). I was interested in the long-term user as well as the health consequences of such drugs which are discussed further in chapter two (Tobutt, *et al.,* 1996).

Student Adult Nurse (1980 to 1983)

I commenced the London Hospital as a student nurse. This programme took three years to complete before being able to enter the professional register (Nursing, Midwifery Council, 2017). During my nurse training, communication theory and skills (Miller, 2005) were taught at the Princess Alexandra School of Nursing. This allowed me to reflect on how interactions and basic interpersonal skills hindered or helped me to work with patients in ward settings of the hospital. I developed my therapeutic engagement skills (Rogers, 1961) further during a mental health placement at St Clements's Hospital. I started to read humanistic psychology theory of self-awareness regarding therapeutic engagement skills (Frick, 1971). This was starting to be implemented both in the training of nurses but also in other health and social care practice (Campbell, 1980). This would help my understanding of necessary therapeutic engagement skills and help with my research interview skills in my opiate follow-up study described in chapter two (Tobutt, *et al.,* 1997).

Staff Nurse, The London Hospital (1983 to 1984)

After completing my training and registering as a State Registered Nurse, I worked on two inpatient wards at the London Hospital. The first job was in an adolescent medical/surgical ward. The second post was in an early years' medical ward. The requirement for communication/interactions with children and adolescents as well as parents meant I developed a certain level of therapeutic engagement skills, such as Benner (1984) suggested. This proficiency in communication in later years would influence my motivational Interviewing skills training (Miller and Rollnick, 2013).

I became interested in communication theory (Gordon, 1970). I started to research and read about other communication models by Egan (1975). Egan encapsulated in five components active listening skills (Egan, 1986). I had started to record on my reflective listening skills by keeping a diary of my experiences and writing how I felt and what I thought was happening at the time. (Burnard, 1985). These active listening skills were to continue developing in my nursing career. They would also help build my qualitative research interview skills in the longitudinal follow-up study of heroin injectors which is discussed further in chapter two (Tobutt, *et al.,* 1997). However, one of the reasons for moving my career from adult nursing into mental health nursing was that at the time the London hospital was a regional cancer care unit for paediatrics, and I saw many deaths of young children. This influenced my feelings and distress of seeing a dying child, but also the lack of talking about death and dying or avoiding interactions altogether by nursing staff (Kubler-Ross, 1969). I decided to undertake mental health nurse training. I left my post after being accepted on a post-registered student nurse (PRSN) programme at the Bethlem and Maudsley Hospitals School of Nursing.

Post-Registered Student Nurse (PRSN – Mental Health) (1985 to 1987)

The mental health nursing programme was 18-months long and based on educational humanistic psychology (Rogers, 1970; Heron, 1976). I developed my mental health nursing skills as well as further proficiency in counselling skills. This training helped me understand the theoretical underpinning of Motivational Interviewing (Miller and Rollnick, 2013). This would help in my future research studies and the training of others in this counselling style (Tobutt, and Milani, 2010). After completing my mental health nurse training, I was fortunate in obtaining a post in the Maudsley Emergency Clinic.

The Emergency Clinic: The Maudsley Hospital (1988 to 1989)

In this post, I not only worked with those in a mental health crisis but also those who presented to the emergency clinic with alcohol-related problems. I then moved into full-time academic research role.

Research Worker, The Addiction Research Unit, University of London (1990 to 1992)

In the spring of 1990, I applied for a research worker's post at the Addiction Research Unit (ARU). I was successful and joined a multidisciplinary department within the Institute of Psychiatry, the University of London as a research worker and registered nurse. At the ARU, I was mentored by the Director, Professor Griffith Edwards, a consultant psychiatrist, whose work had developed the clinical alcohol dependence syndrome (Edwards and Gross, 1976). This clinical dependence syndrome had an impact on my research studies as other disease alcohol disease theorists argue that with alcoholism there is no going back to controlled alcohol use (Vaillant, 1970). In addition, other researchers argue that the individual will switch dependence to another psychoactive drug (Kandel *et al.,* 1992). This issue will be followed up further in chapter two as I measured the alcohol dependence syndrome in my research respondents from both the 22-year follow-up study of heroin injectors (Tobutt, *et al.,*1997) and the Motivational Interviewing (MI) police custody suite study (Tobutt and Milani, 2011). It was also included and discussed in the book publication (Tobutt, 2011a; 2011b; 2011c; 2011d).

While at the ARU, I worked on two research projects that had been funded by Professor Griffith Edwards second Medical Research Council's grant. Firstly, a twenty-two-year follow-up study of heroin injectors from drug treatment centres in London in 1969 that had been indexed and followed-up in 1976 (Stimson and Ogborne, 1970; Stimson, *et al.,* 1978). Secondly, an alcohol dependence treatment study. This treatment study was Ronaldo Laranjeira's PhD work (Laranjeira, 1994). Both projects helped develop my project management skills as well as both quantitative analysis and qualitative interview skills. These skills included the problem of classifying death, survival and mortality ratios and health outcomes. This claim will be followed-up further in chapter two (Oppenheimer, *et al.,* 1994; Tobutt, *et al.,* 1996; Tobutt, *et al.,* 1997) and with brief alcohol intervention (Tobutt, and Milani, 2010) in chapters three and four.

During my time at the ARU, I was accepted onto a place for an MSc in Sociology at London South Bank University. My dissertation supervisor was Professor Hillary Graham, whose previous work was on women's' tobacco smoking (Graham, 1989). This gave me the idea to measure participants' tobacco smoking from the opiate follow-up study for both those off drugs and those still in the treatment system. This will be followed up in chapter two. This MSc programme also helped improve my quantitative skills in probability and standardised data sets (Tobutt, 1994) which helped me undertake the statistical analysis of the sample's survival and death cases when compared to a healthy dataset (Oppenheimer, *et al.,* 1994).

Griffith Edwards also encouraged me to run an outpatient clinic at the Maudsley Hospital Alcohol Treatment Unit, for which he was the consultant psychiatrist and manager. I also had to screen clients for both hazardous drinking as well as alcohol dependence using the Alcohol Use Disorder Identification Test (AUDIT) (Babor, *et al.,* 2001) not only for the clinical issue but for allocation for possible Randomised Controlled Trials (RCTs) that the ARU was conducting. There were also some qualitative studies that needed client recruitment. This screening for the RCTs studies and the randomisation process helped me in setting up the process for the research that I and another colleague developed in the Motivational Interviewing Brief Intervention study in a police custody suite (Tobutt, and Milani, 2010). My next move was to a teaching-intensive post.

University Lecturer, The Centre for Research on Drugs and Health Behaviour and the North-West Thames AIDS Education Unit (1992 to 1997)

I was offered a joint post teaching on a new undergraduate diploma in alcohol and drug studies with two academic institutions. During this time, I began training my students and other health professionals from the tobacco, alcohol, and drug field. I also trained locally in the use of motivational interviewing (MI). This helped me train practitioners in their MI proficiency (Miller and Rollnick, 2013). The theme of MI proficiency and fidelity in research studies will be discussed in chapter four (Tobutt, & Milani, 2010).

During this time, I had a chance meeting at a drug prevention conference with a Chief Superintendent who was from the Greater Manchester Police (GMP) force. We started to work together on a small pilot project for drug prevention in the workplace, called *Drugs and the Workplace* (Williams, 1997). At the time, the John Major government was developing a new drug strategy for the UK. We were both asked to lead and formulate a policy for workplaces,

which we did, and it was placed as an appendix in the new drug strategy (Home Office, 1995). This was my first experience of engaging in policy from the perspective as an expert. It helped me further in this field and ultimately the subsequent book that I will also discuss in chapter three (Tobutt, 2011a; 2011b; Lambrechts, *et al.,* 2011; Tobutt, 2011c; Tobutt 2011d).

University Senior Lecturer/Teaching Fellow and Secondments (1997 to 2010 time)

My joint post ended at the Centre for Research on Drugs and Health Behaviour, and I became a full-time employee at Thames Valley University. This was a teaching post; however, I continued to work on the alcohol and drugs prevention in the workplace programme. I continued to train English police forces and other workplaces in the private sector too. Both the GMP and I contributed to the New Labour Government's drug strategy (Home Office, 1998). I also was involved with the ARMADA group that was developed by the United Nations International Labour Organization [ILO] (1997). This led to a paper that I gave at the fourth United Nations Drug Control Programme [UNDCP] and the ILO international private sector conference on drugs and the workplace in Sweden (United Nations Drug Control Programme/International Labour Organization, 1999; Tobutt, 1999). It was by chance that at this meeting I met my partners for a future European project that I was to coordinate.

This project was funded by the then European Commission's Leonardo programme. It was a training programme with partners from the Netherlands and Sweden (Tobutt *et al.,* 2001). This project developed, tested and evaluated an open learning workbook for supervisors in workplaces in several sectors. It also led to a Swedish book being published and used in workplaces (Tobutt, *et al.,* 2002a; Tobutt, *et al.,* 2002b). I also delivered an ILO training programme *SOLVE* in England aimed at workplaces and prevention of alcohol and drugs in workplaces by proper organisation policy development (Gold and Caborn, 2005). In 2007, I was invited to be a Technical Consultant for the United Nations (UN) Office on Drugs and Crime to develop policy guidelines for UN member states on the prevention of alcohol and drugs in workplaces.

These policy experiences and technical knowledge of alcohol policy and treatment policy at a local, regional and global level came to the attention of the book publisher Gower. This opportunity enabled me to write and edit the book *Alcohol and the Workplace* (Tobutt, 2011e). The chapters that I wrote personally and jointly covered a general introduction to the nature of the problem and its European evidence (Tobutt, 2011a; Tobutt, 2011b). The

pragmatic issue of how to deal with the (problematic) use of alcohol concerning job performance (Lambrechts, *et al.,* 2011) and alcohol screening and assessment (Tobutt, 2011c) and alcohol interventions and treatment (2011d).

The complexity of my roles

In this context statement, I am not only looking back at work roles from a historical point of view, but also from a process of reflecting on my own practice and learning from practice (Gibbs, 1988) as well as on my different work roles (Schön, 1983). I reviewed the complexity of my work roles from the past. I examined the diaries that I had kept when working on my two research projects and old diaries from my previous workplaces (Blaxter *et al.,* 2001) in order to be able to recall and reconstruct my story that Eastman and Maguire (2016) argued is a process within critical autobiography. The knowledge and the complexity has been influenced by Hermeneutic writers such as Gadamer (2013).

Over time, the different work roles that I moved into became more complex in nature. For example, I was not only dealing with patients, nursing staff and medical doctors in a hospital setting but I also had to relate to researchers, research participants, students, technical policy experts, Chief Executive Officers (CEOs) of large private companies, United Nations personnel, Secretaries of State, and two UK prime ministers. Moving from my professional nursing role to research resulted in my management of the 22-year follow-up study (Tobutt et al., 1996). This experience enhanced my skills in project management, and in the development of higher education programmes and training projects (Tobutt, 2001, 2002a; 2002b). There was also a difference working in the policy arena as that required me to take on leadership and entrepreneurial roles. This latter change of role on reflection also helped me develop my leadership skills as a technical consultant for the United Nations International Labour Organization and the Office on Drugs and Crime Programme.

In addition, my role was that of an educator and skills trainer. I was completing my MINT Training New Trainers (TNT) programme, which qualified me to start training MI. This training was and is at an international level e.g., Europe, and the Middle East. Belonging to this global organisation also led me to become a member of the sub-committee of the Motivational Interviewing Across Cultures (MIAC) group. This involves formulating policy on how MINT can develop regional learning communities, how Chapters of MI (regional/branches) adhere to quality reporting measures to the MINT Board and how to work with others in MINT from

other cultures and languages. These experiences involved me knowing how to give advice when requested and knowing when to lead when giving advice based on my experience. I was transforming into that of a translator of knowledge, understanding, skills, advisor and policy developer for others.

Translation and my work roles

One of the translational aspects of my roles emerged in my research career when interacting with Home Office civil servants and Ministers. This knowledge had been there, but I noticed it more with my research role when I had signed the Official Secrets Act (1989) as I was working with sensitive information regarding the 22-year follow-up study. This work enabled me to gain access to other civil servants including those within the Home Office Research Department. Until, recently I have not spoken about this activity. Ultimately, this led to me being allowed to work with two Home Office Minster's during my ARMADA consultancy and with the Greater Manchester Police in developing the Conservative and the New Labour government's strategies on workplace policies related to alcohol and drugs (Home Office, 1995; 1998). The knowledge that I had gained from being a practitioner enabled me to consider the use of phenomenological theory, mainly that of Husserl (Cartesian Meditations, 1999).

In my role as the English Drug-Related Death coordinator (prevention), I drew on my experiences, not only from nursing practice but also from being a researcher in the field, and from my engagement in policy development (Zimmermann, 2015). These policy experiences had in part been learnt from my previous mentor, Professor Griffith Edwards. I, along with other researchers at the unit, would meet international visitors to the Addiction Research Unit, both in the Unit and on social occasions. This included other international researchers from the substance use disorder field, civil servants and politicians, and Professor Edwards would lead discussions on research, policy and education. This contact and interaction were key in knowledge translation.

Working as an ARMADA consultant I had already been advising and developing policy on alcohol and drug problems in workplaces. I used my experiences to date with regards to talking and discussing with CEOs on how to develop a policy or a set of policies for their organisations. This was a different level of translation of practice and policy knowledge and understanding as

it was being translated for a specific field, for those whose job it was to lead an organisation. The role and skills were knowing how to motivate and lead the CEO.

When I moved back to training motivational Interviewing (MI) I became interested in conducting a feasibility RCT study in a police custody suite (Tobutt and Milani, 2011). This meant training practitioners so that they would become proficient in the use of MI before the trial started. This meant that I developed the practitioners' MI skills using my experiences of coaching and giving feedback.

Current University Employment (2012 University of Winchester and 2012 University of Surrey)

I came to the University of Winchester as a senior lecturer to teach on a Child, Youth and Community Studies programme (CYCS) part-time. Subsequently, I moved over to the Health and Social Care Studies (HCSCS) programme and developed a mental health issues and problem substance use modules for both undergraduate programmes.

I also hold a Teaching Fellow post part-time at the University of Surrey. I teach pre-registration nursing both at undergraduate and post-graduate levels. I continue to train health professionals (as well as medical) motivational interviewing.

Structure of the Chapters

The structure of this contextual statement is set out below:

Chapter 2: Historical drug treatment policy: London opiate drug users from 1969 to 1991.

Tobutt, C., Laranjeira, R., Taylor, C. and Oppenheimer, E. (1997) A 22-year follow-up of British heroin injectors. *ANSA Journal, Summer, 1997*: 20-27.

Tobutt, C., Oppenheimer, E., & Laranjeira, R. (1996) Health of a cohort of heroin addicts at London clinics: a 22-year follow-up study. *British Medical Journal,* 312-1435.

Oppenheimer, E., Tobutt, C., Taylor, C., & Andrews, T. (1994) Death and survival in a cohort of heroin addicts at London clinics: A 22-year follow-up study. *Addiction,* 89, 1299 -1308.

Chapter 3: Alcohol policies in workplaces.

Lambrechts, M.C., Tobutt, C. and Bijl, R. (2011) How to deal with the (problematic) use of alcohol in relation to job performance. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower, 119-146.

Tobutt, C. (2011a) Introduction to Alcohol and the Workplace. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower, 1-20.

Tobutt, C. (2011b) The nature of the problem: Examining the evidence. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower, 21-60.

Tobutt, C. (2011c) Alcohol screening and assessment. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower, 147-172

Tobutt, C. (2011d) Alcohol interventions and treatment. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower. 173-207.

Chapter 4: Complex interventions: brief alcohol intervention

Trenoweth S and Tobutt C. (2008) Assessing alcohol use and misuse in primary care. In: Martin C. (ed.) *Identification and Treatment of Alcohol Dependence.* Consort, Cumbria: M&K Update Ltd.

Tobutt, C. and Milani, R. (2011) Comparing two counselling styles for hazardous drinkers charged with alcohol-related offences in a police custody suite: Piloting motivational interviewing brief intervention or a standard brief intervention to reduce alcohol consumption. *Advances in Dual Diagnosis Journal,* 3(4), 20-32.

Tobutt, C. (2015) Alcohol interventions for hazardous drinking and dependency. *British Journal of Mental Health Nursing,* 4(2), 87- 93.

Chapter 5: Research development, methodological review and evaluation

In this chapter, my research development will be addressed. In addition, it will discuss the methods used in the studies and book chapters with their restraints.

Chapter 6: Summary and Conclusion

This final chapter will summarise and conclude the claim from this document.

Summary

In this introduction, I have laid out the basis of my claim for a PhD by published works. I have covered areas of my workplace experiences and my thoughts that have influenced my professional career and who and what I am now. This has included my professional life in health care over a period of 39 years. My early phase of professional practice consisted of training in three different health care areas before moving into higher education and policy development. The first role was as an Operating Department Assistant in a surgical operating theatre. The second was within adult nurse and the third as a mental health nurse. These experiences meant that I had direct patient contact and developed competency skills in communication and counselling styles. The next role was in higher education as a primary researcher and as an educator and then a policy advisor. I had specialised in the problems of alcohol and drugs. Evaluating these life experiences has been to chart how I became interested and had roles in practice, research, education, and policy.

The next chapter in this contextual statement explores my early research career with regards to working on a famous follow-up study of heroin injectors who attended treatment at London drug treatment clinics in 1969. It argues what my contribution is and was from the study via peer-reviewed journal papers as well as their impact.

Chapter Two: Historical Drug Treatment Policy: London Opiate Drug Users from 1969 to 1991

Introduction

This chapter details three published peer-reviewed journal articles that I contributed to in a long-term opiate drug-treatment research study of heroin drug injectors who attended the new drug treatment clinics in London in 1969. To provide the contextual background, this chapter covers what is meant by psychoactive drugs, the historical policy development of drug control and heroin, and the background to the follow-up study. There follows a discussion on how the study started, the first follow-up in the mid-1970s and the second one in which I was involved. The impact of the study will cover the natural history of drug addiction, drug-related death, and health outcomes. Many of the citations in support of the discussions and policy development that I have used are themselves based in a historical perspective as they were and are still key papers or texts.

Psychoactive Drugs

There are many reasons why some individuals or groups of people use or have problems with their use of alcohol, drugs, tobacco or a combination of all three drugs. The term drug refers to any psychoactive substance that is taken by some individual which changes or harms the mind, or body because of the effects of that substance (World Health Organization, 2017). Psychoactive substances are grouped in several ways, but the easiest is to place them into three categories of drug actions (Rang e*t al.,* 2016). These are the drugs that are hallucinogens, drugs that are central nervous stimulants and drugs that are central nervous depressants. Diamorphine (heroin) is a psychoactive depressant drug that derives from the opium poppy, which acts upon opioid receptor sites in the brain [Mu receptors] (Karch *et al.,* 2010). It can relieve pain and produce euphoria, stupor, coma and respiratory depression (Antony *et al.,* 1994). These may and can relate to a drug-related death (National Treatment Agency for Substance Misuse, 2004a). There are physiological changes to repeated doses of diamorphine that can develop into drug dependence syndrome (Jaffe and Martin, 1990). The dependence syndrome (World Health Organization, 2017, Online) includes tolerance and withdrawal symptoms (when the drug is stopped). These symptoms are unpleasant and include feeling unwell, craving for the drug, restlessness, anxiety, yawning, perspiration, a runny nose, gooseflesh, dilated pupils, increased blood pressure, vomiting, diarrhoea, a raised temperature, and insomnia (Jaffe, 1991). The peak of heroin withdrawal is 36 to 72 hours after the last dose, and most symptoms disappear after seven to 10 days (Edwards, 1981). People

develop tolerance to the drug and take more it without overdosing than those with a lower tolerance level (Man *et al.,* 2004).

Many people take or are prescribed diamorphine whether for medical or non-medical purposes and do not experience any problems with their use at all (Darke, *et al.,* 2007). Nevertheless, diamorphine as with other opiates and opioids have the potential to develop drug dependence (Hines *et al.,* 2017). If injected, then tolerance can develop over time. For example, the usual medical dose of diamorphine is 10mg per day, but a tolerant heroin user that is dependent may use between 30mg to 60mg per day (Department of Health, 1999). This dose could kill a non-dependent drug user (Lingford-Hughes *et al.,* 2012).

There has been a long debate about the harm of diamorphine throughout history and how to reduce use through drug controls (Spear, 1994). The next section in this chapter covers the international and national policy context of controlling psychoactive drugs. It is an essential background with regards to understanding the medical treatment for those dependent on heroin.

Drug Policy Context

Most psychoactive drugs are subject to global and individual country controls (United Nations Office on Drugs and Crime, 2013). Heroin (diamorphine) is one such psychoactive drug. Using pharmaceutical diamorphine for drug treatment is illegal for most people in the world due to the treaties signed by most United Nations Member States (United Nations Office on Drugs and Crime, 2013). There are several other treatment approaches for heroin users which are either detoxification or withdrawal from the drug by oral methadone (National Collaborating Centre for Mental Health, 2008). This treatment approach entails the use of methadone, a synthetic opioid drug, as substitution maintenance treatment (National Institute for Health and Care Excellence, 2007). This approach was developed by Dole and Nyswander (1965) who coined the phrase ‘methadone maintenance treatment’ which became a standard approach in the United States of America (USA) in specific drug treatment centres (Preston and Bennet, 2003).

The United Kingdom (UK) is a signatory to the *United Nations Single Convention on Narcotic Drugs of 1961 as Amended by the 1972 Protocol* (United Nations, 2013). Despite this, the British Home Office still allowed medical practitioners to prescribe diamorphine for treatment

of heroin dependence in both the 1960s and 1970s (Stimson and Oppenheimer, 2002). Since, before the new drug treatment clinics in 1969, the consistent aim had been to 'cure' heroin addicts (dependence) by gradually reducing doses over time (Spear, 2002). In the mid-1970s and 1980s, as Stimson and Oppenheimer argued, many of the heroin users at the clinics were persuaded to change to oral methadone maintenance treatment, and even today only a small proportion of heroin injectors will be prescribed diamorphine. Those who are have been in the drug treatment system for some time and deemed to have poor outcomes within oral methadone maintenance programmes (National Treatment Agency for Substance Misuse, 2003b). Only then can they be prescribed injectable diamorphine by a medical doctor with a Home Office Licence to do so (Public Health England, 2017). The 22-year follow-up study that I was involved at the time was of considerable interest by the scientific community, drug treatment agencies, and the Home Office. Because this group had been prescribed pharmaceutical diamorphine from the start on entering the clinics, and they were older than other, younger opiate drug users in the treatment system. Some were still being prescribed injectable diamorphine (Tobutt *et al.,* 1996).

The government department that developed and operated the basic control framework for opiate drug policy in Britain has been led by the Home Office. In the early twentieth century, the Rolleston Committee (Departmental Committee on Morphine and Heroin, 1926) recommended the policy change that allowed heroin addicts, as they were then known, to be treated by general medical practitioners in the community. This issue is essential for my research study as this was a medical approach for drug treatment rather than just control measures issued by the Home Office. This change became known as the *'British System'* (Spear, 1994). Spear was employed at the Home Office from 1952 to 1986 and was its chief police inspector for the Drugs Inspectorate. He argued that the Rolleston Report has been an attempt to medicalise drug dependence. He further argued against those doctors who helped move the 'British System' in the 1970s towards an Americanised system of drug treatment (Trebach, 1994). The legislative programme for change was the Dangerous Drugs Act (Home Office, 1920) and it included both morphine and diamorphine pharmaceutical drugs. The meant that the legislation allowed general medical practitioners of the day to prescribe to individuals whom they thought were dependent on heroin or morphine. Therefore, there was little interference by the Home Office for the legitimate medical use for those who were heroin injectors. This system continued for some thirty years or more.

The prescribing of diamorphine for injecting drug users also required that opiate drug addicts be registered via the Home Office Index and those general medical practitioners had a duty to report to. This control was so that their medical prescriptions and *'addicts'* could be monitored (Edwards, 1981). However, in the late 1950s, there had been a new type of heroin user reported to the Home Office (Spear, 1969). This new user was due to the new pharmaceutically prescribed tablets for injecting that became more widespread in London rather than in the powder form manufactured previously. This increase was also due in part to the two all-night pharmacies that had become popular with heroin injectors in London, where their prescriptions could be dispensed from (Spear, 2002). It was not until the early 1960s that the Home Office started to report a problem in the rise of the number of heroin drug injectors, or what became known as the first *'Brain Committee's'* report (Interdepartmental Committee on Drug Addiction, 1961). The rise was seen in the prosecutions and convictions for drug offences. In 1958 there were 49 for such opiates and in 1968 1,172. This report had recommended that the problem was still a medical issue and not a social one and that there was no case to answer for a change in policy (Stimson and Oppenheimer, 1982).

Background to the Study

During the 1960s, it became apparent that there was an over-prescribing of heroin prescriptions by some private general medical practitioners. For example, three such medical doctors were Lady Frankau, Petro, and Swan who prescribed large amounts of injectable diamorphine to injecting drug users (Glatt, 1966). There followed parliamentary debates about these concerns and a second *'Brain Committee'* report recommended that a change to the (then) current drug legislation be required (Interdepartmental Committee on Drug Addiction, 1965). This legislative change gave more control to the Home Office and the development of the Misuse of Drugs Act (Home Office, 1971) than the Department of Health. Also, this led to the Home Office gaining, even more, control over the licensing of medical doctors prescribing diamorphine for drug treatment. This prescribing practice by specialist Home Office licensed doctors forced a change from general medical practitioners and those in private practice to the new drug treatment clinic doctors. There were 15 new drug treatment clinics in London, often located in teaching hospitals and in the main within psychiatric services (Edwards, 1969). This policy background was how injecting drug users now found themselves in, and a change in how their treatment was provided by the new drug dependence clinics (Stimson and Oppenheimer, 1982).

The Twenty-Two-Year Follow-Up of Heroin Addicts Study

I was employed as a research worker at the Addiction Research Unit, the University of London in 1990 (now the National Addiction Centre, King's College, London). The research study that I was assigned to was funded by a second Medical Research Grant (MRC), held by Professor Griffith Edwards. I worked with Edna Oppenheimer who was a co-researcher and whose professional role had previously been from a social work background. This second follow-up study was started in the spring of 1990 and was completed by mid-1992.

The initial indexing and recruitment to the study began in 1969 when the new London drug treatment clinics opened. The explicit aim was to discover what happens to injecting drug users as clinicians and policymakers were unsure of the impact of the clinics (Stimson & Ogbourne, 1970). A representative sample of one in three people who were attending 13 of the 15 London drug clinics was recruited into the study. There were 128 individuals in the sample, of which 93 were men and 35 women, with an average age of 25 years. All were receiving a prescription for injectable diamorphine (Stimson & Ogborne, 1970).

The first indexing (demographic data) and recruitment of participants to the study began in 1969 when the new London drug treatment clinics opened. The explicit aim was to discover what happens to injecting drug users as clinicians and policymakers were unsure of the impact of the new clinics (Stimson and Ogborne, 1970).

The first follow-up study in 1976 occurred seven years after the index study in 1969 that recruited the sample. Of the 128 in the sample, 15 had died, 40 had stopped using opiates, and 62 were still using opiates, there were four who had refused to be interviewed in 1969 and 1976 and seven who could not be traced. However, these seven were considered alive as there was no evidence that they had died (Thorley, *et al.,* 1977; Stimson, *et al.,* 1978; Wille, 1978; 1981; Oppenheimer, *et al.,* 1979; Oppenheimer and Stimson, 1982). The second follow-up study in 1992 found that a total of 43 had died, 40 were off opiate drug use, and 23 were still using opiates (Oppenheimer, *et al.,* 1994; Tobutt, *et al.,* 1997; Tobutt, *et al.,* 1996; Tobutt, 1996). The same four respondents in 1969 and 1976 also refused to be interviewed. Of the 18 that could not be traced, 10 had partial information on them taken from interviews with relatives and they were reported to be alive. Of the remaining eight, no death certificates were traced, and therefore there was no evidence that they had died.

The central question from this study on the second-follow-up was still *'what happens to heroin addicts'* by reference to official records and by interviewing the people that were recruited to the study. The study's second aim was to evaluate both the drug career and the natural history of problem drug use to plan for better treatment services for drug users in treatment (Edwards, 1984). My claim from the second follow-up study has been the impact of the peer-reviewed published papers, the contribution to the natural history of drug dependence and policy development with regards to drug-related death and health outcomes.

Natural History of Drug Addiction

There is an assumption that in a longitudinal research study people and situations change and therefore it is worthwhile to chart the change and to try and account for it other than to measure death as an outcome, for example (Vaillant, 1970). Several possible dimensions can be examined such as the individual's change, e.g., maturation, role change, attitudinal change, and ageing. For example, change within the political, social, economic, legislative and availability of drugs (Raistrick, 1991). Therefore, longitudinal research can evaluate both the career and the natural history of problem drug use. This method is an attempt to see the interaction between the biological and the social context (Edwards, 1984). Therefore, the idea is to understand both the impact of the medical and social policy for opiate injectors who are dependent. This question is what in part the 22-year follow-up study tried to answer.

One of the impacts from this research study (Oppenheimer, *et al.,* 1994; Tobutt, *et al.,* 1997; Tobutt, *et al.,* 1996; Tobutt, 1996) has been from the Home Office Drugs Research and Planning Unit group, led by a senior civil servant Joy Mott. She asked for a specific report from the study (Taylor, *et al.,* 1993). This report was commissioned by the Home Office to extend the analyses associated with this cohort study with regards to natural history as this was their specific interest at the time (Home Office RPU, 1993, RP 92 2/108/1). The Home Office policy unit was also interested in the findings for treatment services because this longitudinal follow-up had been the only one in England that demonstrated a reliable follow-up from the sample at both points, e.g., 80% of the original respondents were contacted or interviewed. There has been a 33-year follow-up study based in an English town, but the sample was not from a drug treatment clinic, nor was it with any substitution therapy. Secondly, only 20% of the original sample were followed-up, making the results unreliable (Rathod, *et al.,* 2005). Many other short-term opiate follow-up studies had at the time shown relapse back to opiate use as a central aspect of the behaviour of the heroin drug user, with rates typically between 50% and

80% occurring over the year following treatment (Gossop, *et al.,* 1989). The report that was commissioned by the Home Office demonstrated that opiate use and abstinence had become stable categories, but that heroin injectors did not follow a single predetermined course. This cohort moved in two contrary directions as opposed to other theorists such as Winick (1962) and Brecht and Anglin (1990) who argued that after a few years' opiate drug users just mature out and stop. This concept argues that as an individual drug user gets older, then the fun and the drug effects that they experience are not the same and that they will stop using their drugs spontaneously.

There has been a recent review paper on the 28-global opiate longitudinal follow-up studies (Hser, *et al.,* 2015). In this review paper, the opiate drug use trajectories were also examined and found that the evidence does not support those opiate drug users mature and stop. In fact, drug-related death was an issue as they were high. For example, the overall standardised mortality rates (SMR) were 6 to 20 times higher than the rates of the general population. Our study reported an SMR of 12 for the cohort (Oppenheimer, *et al.,* 1994). In the UK, drug-related deaths were becoming an issue for both medical experts and policymakers in the Home Office (Spear, 2002). The drug-related death study that I was involved with was cited in the policy prevention framework working group of the Advisory Council on the Misuse of Drugs (ACMD, 1999). One of the ACMD's role is to produce scientific reports as evidence for UK Ministers to help shape drug treatment policy. However, it is also essential to understand what constitutes a drug-related death.

Drug-Related Death

Defining what constitutes a drug-related death is an important and a legitimate research question. A drug-related death follows the International classification of diseases (ICD-11), which there are many codes for (WHO, 2012). As Frischer (1997) argued, there are many types of deaths and therefore ICD-11 codes, but drug-related mortality refers to all direct and indirect causes of death. The leading causes of drug-related deaths using the ICD-11 criteria are overdoses (accidental, intentional, undetermined); deaths due to diseases connected with long-term abuse of drugs; suicide related to dependence on drugs; accidents influenced by drug use; and deaths due to behaviour associated with drug use.

Overdoses can also be classified as poisoning (accidental intake) or acute intoxication for intentional drug taking. Mortality rates have been undertaken in drug treatment populations

(Frischer, 1997). In the UK, medical doctors are only required to comment on health problems directly leading to or contributing to death, and drug and alcohol issues are often not recorded or mentioned. In the UK, the system for death certification (official) by most doctors and coroners employed by the state to undertake this task were reformed by a national review of the system (The Review of Coroner Services, 2003). I was asked to give evidence in 2002 on drug-related death and certification (Home Office, 2002). This evidence giving was because of the study that I was involved with and the role that I had at the time as the Drug-Related Death Coordinator at the National Treatment Agency (NTA) for Substance Misuse. Following the Advisory Council on the Misuse of Drugs report on drug-related deaths (2000), the New Labour Government undertook a review of death certification and coroner services in England (Home Office, 2003a). The report made 123 recommendations for change in practice and policy. This recommendation led to legislative change with the Coroner and Justice Act 2009 (Home Office, 2009). The new changes had a three-year-long lead-in time for the implementation, starting in 2003 for death certification by medical doctors that were unified in every part of the UK including certifying drug-related death. In the next section of this chapter, this study's impact on clinical services will be discussed.

The drug-related death paper was cited for both overdose and drug-related morbidity (disease) rates and SMRs in the UK Clinical Guidelines for the United Kingdom under the drug-related death and morbidity section (Department of Health, 1999). This clinical report is very critical as the guidelines were linked to improving drug treatment services as well as clinical practice (medical doctors and nurses) to help prevent drug-related death and overdose. The study was cited in the full report of the *Opioid Detoxification Guidelines* (National Collaborating Centre for Mental Health, 2008) about preventing drug-related overdoses. These guidelines were not just about advice but also about medical and nursing competence in dealing with the prevention of overdose and drug-related death.

The drug-related death, strategy for the UK was further developed by the New Labour administration following their response to the Advisory Council of Misuse of Drugs report (ACMD, 2000). In this report, the drug-related death study was cited again in the prevention of overdose, drug-related death and drug-related morbidity. I was approached by a senior civil servant in the Department of Health to apply for a newly created post in 2002. This post was based on the arms-length government agency the National Treatment Agency for Substance Misuse (NTA, 2002). This department was different to other government departments as it

was considered a Special Health Authority and the staff were not 'traditional' civil servants but researchers, managers, and practitioners from the drug treatment field. The role of the Drug-Related Death Coordinator meant that there was a budget for both treatment prevention programmes as well as research studies and some policy writing. This role had followed the Government's response to the ACMD report to develop a drug-related death strategy (Department of Health, 2001). On the one hand, this post for was funded for one year only. However, on the other hand, there was a work programme focussing on the prevention of overdose and other drug-related deaths. I could commission and write with other medical and nursing experts a series of clinical guidelines that were much more specific than in the previous Clinical Guidelines (Department of Health, 1999) to prevent an overdose of opiate drug users. The areas for the guidelines that I had commissioned and co-wrote for preventing drug-related death were for drug treatment services and general clinicians (NTA, 2003a) general clinicians. Brief intervention for the reduction of alcohol consumption to reduce overdose, aimed at clinicians (NTA, 2003b); for commissioners (NTA, 2003c); and for those running telephone help lines (NTA, 2004e). In 2004, a general article was published by the NTA for preventing overdose, and blood-borne infections guidance was also produced for prevention (NTA, 2004b).

The drug-related death paper that I co-wrote with my colleagues (Oppenheimer, *et al.,* 1994) has been cited 250 times using ResearchGate. This paper has also impacted upon those researchers who are interested in opiate drug treatment populations around the globe. The latest citation has been published online in an American peer-reviewed journal *Crime and Justice* by Caulkins and Reuter (2016). This paper was published online in November 2016 and will be published in the journal in 2017. The other recent paper that has used the drug-related death citation was led by a medical doctor (Lovrecic, 2016) in the Slovenian Public Health Institute. The team had argued that reducing drug-related deaths is related to access to opiate prescription drugs as well as those who did not have access in 2015. This study was published in the peer-reviewed *Heroin Addiction and Related Clinical Problems* (a European journal).

The importance and impact of the drug-related paper from the 22-year follow-up study of heroin injectors published in 1994, is that it is still recognised as a seminal paper. The significant implication for researchers and policymakers as well as health professionals in drug treatment is that a mixed drug overdose has been a major cause of death in long-term opiate drug users.

Health Outcomes

With regards to the interpretations of research methodology, this long-term follow-up study is firmly positioned within a sociological life course theoretical perspective, although there is the empirical perspective of drug-related death from opiate overdose. This issue gives rise to the problem of interpreting outcomes for drug treatment interventions using methods from the natural sciences. Nevertheless, at this second follow-up, there has been an impact on health outcomes for those who were still alive from the study (Tobutt, *et al.,* 1996a; Tobutt, *et al.,* 1997).

This cohort had been prescribed diamorphine by prescription from the new drug treatment clinics in London, and a move away from general practice in the late 1960s. However, this did bring them into contact with psychiatrists and nurses in outpatient settings often within psychiatric hospitals. It also reduced the quantities of drugs prescribed, and some were encouraged to accept methadone in place of their injectable heroin prescription (Stimson and Oppenheimer, 2002).

Physical problems with injecting opiate drugs are a risk. The risks can be from the injecting practice itself (Sell, *et al.,* 2001), for example, when injecting prescription opiates and other drugs. This study group had often been prescribed many injectable prescription drugs such as cocaine and amphetamines, a clinical practice no longer followed (Department of Health, 2017). However, injecting practice can result in several health-related conditions. For example, from poor sterile injecting practice that may result in cellulitis that can also result in thrombophlebitis. Abscesses can form that will require incising and draining by medical professionals (Farrell, 1991).

The most common infection in this cohort to be transmitted with sharing injecting equipment from an infected individual has been hepatitis B (Oppenheimer, *et al.,* 1979). No deaths were thought to be related to the Human Immunodeficiency Virus (HIV), as this cohort was pre-HIV reporting, although it cannot be ruled out (Oppenheimer, *et al.,* 1994). However, in the previous follow-up, 13% (N=8) of those interviewed (N=61) reported abscesses at their injection sites, 1% (N=2) reported to have had septicemia, and 2% (N=4) contracted hepatitis. In the second follow-up (Tobutt, *et al.,* 1996), the group that continued to use opiates, reported more physical health-related problems because of their injecting heroin use. These were abscesses, septicemia, and physical damage to their veins due to their injecting practice

than those who did not use opiates. In the drug treatment system in England, it has been recognised both in the clinical guidelines (Department of Health, 1999; Clinical Guidelines on Drug Misuse and Dependence Update 2017 Independent Expert Working Group, 2017; Advisory Council on the Misuse of Drugs, 2000; 2016) that there is an ageing injecting opiate drug population that requires more physical health care as they get older than their younger counterparts.

One of the impacts has been the dissemination of the study with regards to the health of long-term opiate users and those who were *'off'* opiates. One of the dissemination paths has been in the nursing practice literature. Following the publication of the health outcomes paper in the *British Medical Journal* (Tobutt, *et al.,* 1996) the *Nursing Times* (a peer-reviewed journal aimed at all nurses) contacted me. The journal editor commissioned me to write a short research report so that nurses could read about the study as it had an important message about long-term drug users' health (Tobutt, 1996). With this publication, a national nursing organisation called the Association of Nurses in Substance Abuse (ANSA) contacted me to write a paper for their peer-reviewed journal to combine both the drug-related death paper and health outcomes papers. Also, I was invited to present the study in full at the 13th ANSA national conference (Substance Misuse – a generic response) in the summer of 1997. The composite paper also introduced the notion of the cohort's life history methodology (Tobutt, *et al.,* 1997). To date, there have been 11 citations of the health outcomes paper using ResearchGate's statistics to date.

One further impact from this cohort study has been for the academic world concerning alcohol dependence. Many other long-term studies of opiate drug users have reported that their participants have switched their opiate use to alcohol use. The alcohol dependence syndrome replaced the term alcoholism in clinical diagnostic frameworks such as the World Health Organization's International Classification of Diseases with the work of my former professor at the Addiction Research Unit (Edwards and Gross, 1976). In 1981, it was accepted as the dependence syndrome in both the World Health Organization's *International Classification of Diseases* and the American Psychiatric Association's (APA) *Diagnostic and Statistical Manual of Mental Disorders* (Edwards, *et al.,* 1977). The difference from the disease term alcoholism is that it is a bi-axel model and not a unidimensional model (Drummond, 1990) that emphasises psychological features over the physiological aspects. It is then possible to go back to controlled drinking with this model, depending on the severity of dependence (Sobell and

Sobell, 1981). In most long-term opiate or alcohol drug treatment follow-up studies, most researchers claim that controlled drinking is not possible and drug users just switch to alcohol and will become *'addicted'* just as they were with opiates (Vaillant, 1973; Vaillant and Milofsky, 1982). On the other hand, studies such as the Vietnam follow-up study emphasise that it is possible to go back to controlled drinking (Robins, *et al.,* 1974; Robins, *et al.,* 1975). The health outcomes from this 22-year follow-up study showed that of those respondents still using opiates (N=23) only one respondent was classified as alcohol dependent. None of the other respondents who were classified as 'off' opiates were also not dependent either (N=40). However, in this paper both groups smoked tobacco, and the possibility of tobacco-related deaths in later life is a further health risk factor.

Summary

The evidence presented in this chapter in the publications from the 22-year follow-up study of heroin drug users has been attempting to address the question of *'what happens to heroin addicts'* that were indexed in the new drug treatment clinics in 1969. The treatment of opiate drug users in that time did not have a forward plan from a policy perspective other than control by the State. It was thought by those *'specialist'* medical doctors that there would be a reduction in opiate medical prescriptions in the short term to individuals' registered at the clinics and a reduction in opiate medical prescriptions in the short term to individuals registered at the clinics. The impact on drug treatment policy has been in the prevention of drug-related deaths with a prevention and pragmatic policy programme in the early part of this century. To a lesser extent, the natural history and health outcomes have had less of a perceived impact.

The next chapter in this contextual statement explores the impact and evaluation of the published works of alcohol policy in workplaces.

Chapter Three: Alcohol Policies in Workplaces

Introduction

This chapter shows how working with policy-making bodies can have an impact and the results of this engagement are disseminated into a collaborative output. The structure of this section covers the contextual background of the policy shift from the individual medical and illness perspective on alcohol issues in the workplace to prevention and well-being approach that involves employees, managers, and the organisation. This section is related to my four book chapters that I authored and a fifth chapter that I co-authored with two other colleagues (Tobutt *et al.,* 2011a; Tobutt *et al.,* 2011b; Tobutt *et al.,* 2011c; Tobutt *et al.,* 2011d; Lambrechts *et al.,* 2011). I was the book editor as there were eight chapters in total (Tobutt, 2011e).

The contextual background is essential in understanding the roles and work of the International Labour Organization, the United Nations Office on Drugs and Crime and the World Health Organization with regards to workplaces and alcohol at work plans. This narrative is crucial as these three global organizations had been developing policy and strategy with regards to drugs, alcohol and the workplace (World Health Organization, 2012; International Labour Office, 2003). These developments have been discussed and developed for some 32 years or more (Shahandeh, 1985). Later, in this chapter, I will detail how I was involved in these programmes. For example, *Managing Alcohol and Drug Issues (MADI)* project (Tobutt *et al.,* 2002a; 2000b), the SafeWork *SOLVE* programme (International Labour Organization, 2000), and the Association of Resource Managers Against Drugs (ARMADA), programme (Gale, 1999). There was a further project that I was involved with as a technical consultant for the United Nations Office on Drugs and Crime (2009). This expert project group developed guidelines on alcohol and drugs policies in workplaces for member states of the United Nations. These were all critical experiences and developments that led to the book being written. Although the focus of my work in the workplace has been on alcohol, this sometimes has been associated with other psychoactive drugs. For example, prescribed medicines, over-the-counter medicines, and illicit drugs in prevention policy (Home Office, 1995; 1998; 2003b; International Labour Organization and United Nations International Drugs and Crime Programme, 1998; 1997).

There is a focus on the International Labour Organization's (1996) code of conduct used for developing policy in workplaces. This book project has had a different target audience than that of the 22-year follow-up of the heroin injectors' research study. It was not an academic, scientific research project, but a practical one aimed at helping those in workplaces develop an alcohol policy that is not reactive but proactive (Gärdegård, 2004).

International Labour Office

The International Labour Office is a secretariat at the United Nations, a specialised agency that is responsible for health and safety at work (International Labour Office, 2017). The International Labour Office (ILO) in 1994 convened its 259th meeting of its governing body to develop a code of practice and drafting a publication on the *Management of alcohol and Drug-Related Issues in the Workplace* (International, Labour Organization, 1996). This system of practice is the benchmark or standard setting for promoting the prevention of alcohol and drug-related issues in the workplace including both the private and public sectors. This ILO code also recognises the shift to prevention and that alcohol and drug-related issues by employees and employers are considered a health-related problem. Developing a workplace policy in any country using the International Labour Organization standards (1996) views the problem of alcohol and drugs among both employees and employers as a welfare approach. This employee approach means a health and social approach and not just a disciplinary or criminal justice approach e.g., the termination of employment, but a supportive approach. My involvement with the International Labour Office has been in working with the Greater Manchester Police force in developing policy developments with the British government. Superintendent David Williams and I had meetings with the International Labour Office in London before working with United Kingdom (UK) government of the day to help the policy development for the country (Home Office, 1995; 1998). This event was introducing the code to both the policy development but also into the proposed and subsequent training of workforces and organisations in the United Kingdom. For example, Police Forces in England, Remploy, and SCA.

Workplaces and the Shift to Prevention

The shift was a medical policy that focussed only on those who may have alcohol dependence in workplaces to a preventative policy for the entire workforce. This policy shift was promoted at a global level and coordinated by the United Nations International Drugs and Crime Programme and the International Labour Organization. These global organisations developed

and delivered a series of global conferences in the 1990s (Plan Nacional sobre Drogas of Spain and United Nations International Drugs and Crime Programme, 1993; International Labour Organization and United Nations Office International Drugs and Crime Programme, 1995; 1997; 1999). The conferences promoted the prevention approach and demand reduction approach. The target group was aimed at the general population using risk factors and specific interventions for those who have not considered seeking early help (Di Martino, et al., 2002). In the training of police forces by myself and Superintendent Williams and other private companies in England, the use of the traffic light zones was promoted (International Labour Organization, 2003). This training included the yellow zone for those drinking too much or having problems with their drinking but are not dependent (red zone). I had been delivering training events at first with public bodies such as UK police forces where there were recent new workplace policies of drugs and alcohol prevention written by managers in the 1990s. However, I was becoming a thought leader in alcohol prevention policy and training for organisations and private and public companies as well as government.

This development was a process of not just being a trainer for an organisation or company to train on a prevention training event but much more with regards to consultancy and developing leadership within organisations, rather than with human resources or middle managerial staff. I became a consultant for the Association of Resource Managers Against Drug Abuse (ARMADA) in 1999, and this led to more influence among business and organisations. This consultancy examined an organisation's sickness absence record as well as the costs involved. Also, all current sickness and absence policies were reviewed along with disciplinary policies as this was a United Nations-backed programme approach. This influence was the discussion and key objectives of an alcohol prevention programme for an organisation or sector. For example, the work I undertook with SCA in the United Kingdom.

ARMADA Programme

The Association of Resource Managers Against Drug Abuse (ARMADA) was a programme developed by the International Labour Organization (International Labour Office, 2003). It established a group in Europe to provide a sustainable model for alcohol and drug prevention programmes in workplaces in 40 countries (Gärdegärd & Eriksson, 2011). The ARMADA programme was a forum for private sector company managers who want to improve productivity by mobilising better conditions with regards to health and safety and raising the issues of alcohol and drug use that can affect work performance. However, as Gärdegärd,

(2004) reported the other aim of ARMADA was primary prevention for all employees and employers and not the old 'treatment' and 'reactive' led Employee Assistance Programmes where the issues were not owned by the workplace (Jacobson and Sacco, 2012). The basis of a local ownership and key players in a workplace organisation owning the problem is still a good model that can develop a good alcohol policy for a workplace organisation (Lloyd, 20011). I became a consultant for the ARMADA programme from 1999 to 2002. However, there are other models for policy development that have been used in Europe. For example, the British 'top-down' approach to policy making at a local level (Williams and Tobutt, 1997). The collective 'bottom-up' approach from Sweden (Gärdegärd, 2004) to the Italian 'scientific' model approach (Cooperativa di Studio e Ricerca Sociale Marcella, 1988). My involvement in ARMADA was to work and advise companies in developing alcohol prevention programmes in workplaces. For example, AkzoNobel (both in Netherlands and England), and SCA (Sweden and England).

United Kingdom Drugs and the Workplace (Including Alcohol)

During the mid-1990s I began a partnership project with a Chief Inspector of the Greater Manchester Police force. Although the project was called Drugs and the Workplace (Williams, 1997), I included alcohol and developed and delivered the training for private sector organisations. It was built on the fact that we had an input into John Major's Tory government's drug strategy *Tacking Drugs Together* (Home Office, 1995) with workplace policy development. Also, this work continued through the New Labour government's strategy *Tackling Drugs to Build a Better Britain* (Home Office, 1998) were funding was identified for significant public investment for drug prevention programmes in workplaces.

In a European workshop (Tobutt and Williams, 1999) I met my other European collaborators with whom I was to coordinate a European training programme for supervisors and alcohol and drug problems (Tobutt *et al.,* 2001). Some of the project players also went on to write the book with me, since, they were experts in the alcohol prevention field and were ARMADA consultants.

SafeWork: *SOLVE*

The SafeWork *SOLVE* programme was developed by the International Labour Organization in the 1990s and focused not only on alcohol problems in the workplace (Di Martino *et al.,* 2002). It aimed to reduce work-related accidents, injuries, and diseases by providing education on the

protection of the workforce and prevention of the problems in the first place related to work stress. I had been developed to deliver the national SafeWork *SOLVE* programme (Gold and Caborn, 2005) in 2003 in Brussels, Belgium. I delivered several training events in England from 2004 to 2007. This training experience led to further policy work with the United Nations Office on Drugs and Crime. I was trained in the delivery of this programme and delivered an increasing number of training programmes for English and Welsh organisations from the private sector over several years.

United Nations Office on Drugs and Crime Project (Including Alcohol)

I was invited by the United Nations Office on Drugs and Crime in (2009) as a Technical Consultant with others from across the globe to develop and draft guidelines for workplace prevention for alcohol as well as drugs. This expert group's work led to a summary briefing being written for the *Commission on Narcotics 53rd session* (Commission on Narcotic Drugs, 2010) of the 2009 demand reduction action plan of the United Nations. This project work gave me a different experience of cooperative writing which helped me identify the different audiences in the workplace for the book and chapters that I started writing in late 2009.

The Book

The commissioning of the book was in response to the publishers approaching the International Labour Office for a specialist who could be considered to write a book on alcohol issues in the workplace. I was approached by the publisher as I was a British coordinator of the SafeWork *SOLVE* programme (Gold and Caborn, 2005). Joanna Caborn had recommended me as an expert to edit the book as she had already published a chapter in a book by the same publishing company called *Addiction in the Workplace* (Ghodse, 2005). These experiences and projects led to this book being aimed at Chief Executive Officers (CEOs), managers, supervisors', occupational health advisors and nurses so they could develop alcohol policies and procedures in their workplaces. The book was published by Gower Publishing entitled *Alcohol and the Workplace* (Tobutt, 2011e).

I contacted my ARMADA colleagues and others whom I had worked with on other projects (Tobutt, *et al.,* 2002a; Tobutt *et al.,* 2002b) to see who would be prepared to help write the book. This book proposal was then sent to the publisher, and the proposal was peer-reviewed. There were some changes to the book proposal, but they were not significant, and the book commissioned with me as the editor (Norman, 2010).

The seven other contributors were considered experts and had worked at the international policy level as technical consultants and came from Sweden, the Netherlands, Belgium, and Switzerland. I edited the book (Tobutt, 2011e) and wrote four of the chapters (Tobutt 2011a; 2011b; 2011c; 2011d). One chapter was on the introduction of the book and topic, one was on the nature of the problem, and two were on the identification of alcohol problems, dependence and treatment interventions. I contributed to a joint chapter on how to deal with alcohol problems in the workplace (Lambrechts et al., 2011). There was a chapter on workplace testing (Bijl *et al.,* 2011) and *communities and employers working together* (Gärdegärd and Eriksson, 2011), as well as policy development (Lloyd, 2011).

Methods

To write this book, all the contributors undertook a literature search to review the current evidence and identify case studies and policy examples. This method involved using keywords as a rule for gathering the best evidence, looking back no more than ten years, although some papers and documents were still crucial, e.g., *Code of Conduct* (International Labour Organization, 1996). The grey literature and hand searching was also conducted (Brunton *et al.,* 2012). Also, the contributors had worked together on a recent *European Commission Union* funded project on workplace prevention and had recent examples and models such as *the five-step formula* (Williams, 1997) and the *conversation interview* (International Labour Organization, 2003). The literature searches for each of the eight chapters by the contributors were therefore international and included both the Swedish, Dutch, French, Flemish, and English languages. All types of evidence were included scientific as well as policy papers and documents. The secondary aim of the book was in part a practical one by translating the best evidence for practice for both policy developments in organizations and from the health-promoting perspective.

Impact of the Book

The book was published in the autumn of 2011, and the evidence for its impact is different from that of chapter two. Evidence of the impact of the book has come from book reviews, sales, and reports from newspapers. There is additional evidence from the book being recommended for courses in higher education.

Book Reviews

There were two critical reviews of the book from two peer-reviewed journals. The first was from The Royal Society for the Prevention of Accidents (*RoSPA*) *Occupational Safety and Health Journal*, (2011) and the second was from *Addiction* journal (2012). Both are essential peer-reviewed journals. The *Addiction* journal has an impact factor of 4.145. While in the strictest sense an impact factor of the journal for a book review is not applicable, it does mean, however, that *Addiction* is a critical journal. The review offered a favourable opinion reporting that 'there is something for everybody' (New Books, 2012:229). This review found that the use of self-assessment questions for the reader after each chapter was beneficial and practical. The RoSPA journal is read by mainly health and safety practitioners, consultants, and occupational health workers. RoSPA's vision has always been safety first. This review of the book would have reached all its members, although there are no viewing figures available. The RoSPA review was very favourable reporting that it was a practical guide on how to manage alcohol issues and problems in the workplace.

There have been two reviews online, one on the International Professional and Applied Management Review (IPMA) journal website (online, 2017, [screen capture]) and the other one on the *Los Angeles Times* newspaper in the United States of America (USA) (Wilson, 2012). Again, the previous review was favourable and re-worded one of the key messages from the book that is suggesting that '…the key collective message is to solve the problem by taking the alcohol not the person out of the workplace.' *The Los Angeles Times* article online was written by Scott Wilson, a researcher for the paper. In the article, the other key messages were taken from the book such as 'watch for the signs,' and do 'not delay action' (Tobutt, 2011a; 2011b). The article identified me by name as an expert. This newspaper is the fifth largest newspaper in the USA, with a circulation figure of 572,998 (Hsu, 2011), and therefore the dissemination of key messages from this book, reached a wider global audience.

Sales

The book is still available on Amazon (online, 2017a, [screen capture]) whose review uses the RoSPA Occupational Safety & Health Journal page (2011). Lastly, this book has been purchased as an e-book by Strathmore University for a library project in Nairobi, Kenya that is held in the electronic library (Uzima, 2012). In total 250 hard backed books were printed and sold within the two years and in 2016, six e-books sold (Abbots, 2017)

Summary

This chapter has covered the contextual background of alcohol policy development that I was involved with during the late 1990s and into the 21st century that led to the publishing of the book *Alcohol and the Workplace* (2011e). The experience and impact have been different as the book was aimed at those who developed policy in workplaces. It was aimed at a European audience, and the impact has been global.

I then moved from the alcohol workplace policy making and training to brief alcohol intervention and primary research. This move was due in part to working with a new member of staff at Thames Valley University who was interested in alcohol research from an empirical perspective. Also, I had applied for a small feasibility research grant from *Alcohol UK* and was successful. From 2010 my career took a different path and after working on short-term contracts during which I wrote an addiction MSc programme, an evaluation research study and an e-learning programme on brief alcohol intervention I found part-time employment with two universities. This situation has enabled me to develop the next phase of my academic career regarding brief alcohol interventions. The next chapter details my claims from a book chapter and two peer-reviewed papers on brief alcohol intervention.

Chapter 4: Complex Interventions: Brief Alcohol Intervention

Introduction

This chapter details my claim from a book chapter, and two peer-reviewed journal articles that I contributed to on alcohol problems, identification and screening and the use of a complex intervention. For the contextual background, this chapter will cover the issue of alcohol problems in populations and reducing consumption and risk using brief intervention (brief alcohol intervention). There follows an explanation of what a Motivational Interviewing (MI) brief alcohol intervention is as opposed to a standard brief alcohol intervention. The role of the book and the two peer-reviewed articles will be discussed with my input and impact. This work was carried out when I was at Thames Valley University, before moving back to the Addiction Research Unit at King's College London, and then onwards with a move to the University of Winchester and the University of Surrey.

Contextual Background to Alcohol Problems

Alcohol consumption is a significant public health concern worldwide (World Health Organization, 2014). While there is considerable variation in consumption levels globally, alcohol has been rising over recent decades in many developing countries. Moreover, excessive alcohol consumption and alcohol-related problems is the second highest disease burden in high-income countries after tobacco use and third worldwide after childhood underweight and unsafe sex (World Health Organization, 2014). As well as contributing to over 60 types of diseases, many fatalities are attributable to alcohol (National Health Service Digital, 2017). Indeed, alcohol represents the fifth leading cause of morbidity and premature death after high blood pressure, tobacco smoking, household air pollution from solid fuels and a diet low in fruits (Lim *et al.,* 2012). It is responsible for almost four percent of all deaths worldwide (World Health Organization, 2014). In the United Kingdom (UK) the most recent estimates indicated that alcohol-related problems cost the National Health Service (NHS) between £2.7 (Health Improvement Analytical Team and Department of Health, 2008) and £3.5 billion (Department of Health, 2013) per annum. Furthermore, the cabinet calculated that the total cost to the UK economy is £25.1 billion each year (National Audit Office, 2008).

Epidemiological data indicate that hazardous and harmful drinkers account for most of the alcohol-related problems within a population (Poikolainen et al., 2007; Rossow and Romesljo, 2006). Hazardous drinking is a regular pattern of alcohol consumption which increases the risk

of physical or psychological problems (Saunders and Lee, 2000) whereas harmful drinking is defined by the presence of these issues (World Health Organization, 2014). Dependent drinkers, who are the most problematic drinkers, represent a much smaller group with hazardous and harmful drinkers outnumbering dependent drinkers by a ratio of 7:1in the United Kingdom (Drummond *et al.,* 2004). As such, hazardous and harmful drinkers collectively contribute many chronic health problems due to frequent heavy drinking, acute health problems and social disorder resulting from intoxication. Facilitating a decrease in alcohol consumption in hazardous and harmful drinkers will result in a higher reduction of alcohol-related problems at a population level. Furthermore, the new Chief Medical Officer's report (Department of Health, 2016) reviewed the sensible drinking guidelines from 1995 but ignored the 2007 strategy and guidelines. However, this has resulted in more unequivocal evidence of the risks for several cancers (breast cancer notably) that increases with the consumption of any amount of alcohol.

Brief Alcohol Interventions

A complex intervention such as a brief alcohol intervention is a secondary preventive activity, aimed at individuals who are drinking excessively or in a drinking pattern that is likely to be harmful to their health or well-being (Kaner *et al.,* 2009). The approach is grounded in psychological theory and broadly based upon social learning theory (Bandura, 1997). I was trained in brief alcohol intervention whilst employed at the Addiction Research Unit as the researchers who had a clinical professional background ran alcohol or drug outpatient clinics. I also trained alcohol workers to use this intervention in combination with motivational interviewing later in a research study (Tobutt and Milani, 2011). In addition, I would train other health professional staff this technique on an undergraduate programme for drug and alcohol studies. Again, this training was used for the alcohol workers from the feasibility Randomised Controlled Trial (RCT) study set in a police custody suite.

Motivational Interviewing Brief Alcohol intervention

MI is a person-centered non-authoritarian counselling style, where an identified change goal toward which the conversation is directed and evoking and strengthening of the person's own motivations for change (Bien, *et al.,* 1993; Miller & Rollnick, 2013). Zweben *et al.,* (2003) argued that a brief motivational intervention for the practitioner is one of a facilitator and not the educator or expert. MI has also been trialed using brief interventions to reduce alcohol consumption (Aharonovich *et al.,* 2006). There is no evidence that confrontation works with

this complex intervention. I used MI brief intervention in a small-scale research study that is reported later in this chapter.

Book Chapter – Alcohol Screening and Identification in Primary Care

I was working at Thames Valley University in early 2007. My colleague and I were approached by Professor Colin Martin, who held a position of Chair in Mental Health at the University of the West of Scotland. He asked if we would like both to be co-authors of a chapter in his new proposed book that he was writing and editing (Martin, 2007). It was to be a short chapter of no more than 5,000 words in length focusing on alcohol screening and clinical assessment. The book was aimed at those clinicians who work in alcohol problem services in the United Kingdom. While the primary aim of the book was examining alcohol dependence (Martin, 2008), our chapter was focussed on alcohol assessment and identification of problems and not dependence.

Methods

As with my other book in chapter three of this contextual statement, in writing the section with my colleague I undertook a review of the literature with regards to the current evidence of alcohol screening tools and assessment. We also used alcohol policy and strategies from both England and Scotland (National Treatment Agency for Substance Misuse, 2006; Department of Health, 2007; Cabinet Office, 2004; Scottish Intercollegiate Guidelines Network, 2003). The book with the chapter was published in the following year (Martin, 2008; Trenoweth and Tobutt, 2008). I wrote the sections on categories of alcohol consumption, models of care and assessment, which formed approximately half of the chapter.

Contribution and Impact of the Book Chapter

The book was mentioned in the *Addiction* journal book section in the following year from publication (New Books, 2009). Also, there was a book review (but not explicitly of our chapter) on Amazon (Amazon, 2017b). The book chapter was used in a research paper on the assessment and management of alcohol protocols in Glasgow (McPherson, *et al.,* 2012). This study specifically focused on the issue of the use of the Fast Alcohol Screening Tool (FAST) that used four questions from the AUDIT screening tool that was reviewed in the chapter (Saunders *et al.,* 1993b; Hodgson *et al.,* 2002). The work has also been cited in a further nursing textbook chapter entitled '*A comprehensive health assessment*' (Margeson, *et al.,* 2010). In addition, it has been cited in a further nursing textbook on long-term conditions (Margeson, and

Trenoweth, 2010). Colin Martin's (2008) book has sold over 1,000 copies (Roberts, 2017). The original book is now out of print, and the e-book is the only version available.
The next section of this chapter discusses the feasibility study that I conducted using motivational interviewing brief intervention to reduce alcohol consumption in a police custody suite for hazardous drinkers.

Background to the Study: Learning MI

Miller and colleagues (Miller, *et al.,* 2004) were clear that it is not easy to learn MI. It is not the number of hours spent reading that achieves proficiency, but learning occurs by practising MI with coaching and feedback (Moyers *et al.,* 2005; Martino, *et al.,* 2011). Miller and Rollnick (2013) argued that after an initial two-day training an individual can gain proficiency with six coaching and mentoring sessions from audio tapes of live client sessions. Medical and psychological interventions are tested empirically using RCTs. The importance of fidelity for practitioners' using a complex behavioural intervention is one of quality assurance (Miller, *et al.,* 2005).

In 2007, I had submitted a grant application to the Alcohol Education Research Council (AERC) for a feasibility randomised controlled trial for study and was successful. This complex behavioural intervention tested a standard brief intervention and an MI interviewing brief intervention for hazardous drinkers who had been charged with an alcohol-related offence in a police custody suite.

The methods used for the study included the training of alcohol workers in the use of MI and brief intervention in a three-day training session, run by myself as the trainer (Moyers. *et al.,* 2008). To assess proficiency over a four-month period, the trainees submitted a videotape of their MI skills and the tape was evaluated using the Motivational Interviewing Assessment Supervisory Tools for Enhancing Proficiency from the National Institute of Drug Abuse and Substance Abuse and Mental Health Services, [MIA-STEP] (Martino, *et al.,* 2006). The training and coaching took place from April to August 2008.

The Study

This took place in a police custody suite that was part of the alcohol arrest referral scheme, funded by the British government (Home Office, 2012). An alcohol worker visited the police custody suite every weekday morning but not at the weekends. Any offenders charged with

alcohol-related offences the previous evening or during the night were assessed in the police cells. Offenders were screened for their alcohol consumption using the Alcohol Use Disorders Identification Test (AUDIT) tool (Sanders *et al.,* 1993a; 1993b). Any possible alcohol dependence indicated by the AUDIT score was referred onward for a comprehensive alcohol assessment and the person was excluded from the study. Also, the case records from the assessment by the alcohol arrest referral worker allowed additional demographic information to be used in the study. In addition, case records from the assessment by the alcohol arrest worker allowed additional demographic information to be used in the study. The randomisation of the study participants used a double-blind method. This method indicated that the alcohol workers and I did not know if a participant would receive a standard brief intervention or an MI brief intervention. A statistician at the University used a computer programme that delivered random numbers, and these were then used to allocate participants. Possible bias in the study was reduced by the allocations being placed in sealed envelopes which were opened by the duty manager. A mixed within (T1 vs. T2) and between (BI vs. BIMI) subjects' design was used. The two randomised groups had the same outcome measure used at T2 (AUDIT score) 12 weeks after the index AUDIT score from the police custody suite setting. The study was scheduled for data collection from September 2008 to February 2009. However, it was extended for sixth months due to more participants with possible alcohol dependence being identified (Tobutt and Milani, 2011).

The analytical tests were the statistical means, and the Student's t-test as well as Chi-Square and Fischer's Exact test for the frequencies (Fischer, 1922). For the effect of the complex behavioural intervention and mean AUDIT scores a General Linear Model (GLM) repeated measures test was used (Field, 2005). I did the initial statistical tests, but my co-author checked them. Also, I used for the first time the inferential statistics of size effect and power for posthoc using the software programme G*Power (Faul, *et al.,* 2009).

The results of this pilot study showed that after 12 weeks their lower AUDIT scores which were statistically significant indicating that the study participants had reduced their alcohol consumption at T2. There was an effect using either an MI brief intervention or a standard brief intervention, but there was no statistical difference between the two groups. Thus, it was difficult to conclude if it was the standard brief intervention or the MI brief intervention.

Contribution and Impact of the Paper

The study was reported to the funders for dissemination via the AERCs outputs (Tobutt, *et al.,* 2010a). The journal in which this study was published has a Scopus Cite Score of 0.68. The paper has been read 20 times and cited once according to Research Gate. It has also been read 20 times via Academia.edu and there are 40 people following my publications (both MI researchers and (practitioners). I also presented the study at the Motivational Interviewing Network of Trainers (MINT) as a poster presentation in San Diego, United States of America (Tobutt *et al.,* 2010b). Also, when I returned to the United Kingdom I was approached by Steven Cole, a psychiatrist at Stoney Brook University Medical Centre, asking if I would co-present with others (Cole *et al.,* 2011) on motivational interviewing at the *American Psychosomatic Society* being held in San Antonio, United States of America (USA) as well as give an individual presentation (Tobutt, 2011f).

Brief Alcohol Interventions Journal Article

I was approached by the editor of the *British Journal of Mental Health Nursing* (Gourney, 2015) to write an article on reviewing alcohol brief intervention and treatment interventions for mild alcohol dependence including the new pharmaceutical drug Nalmefene. It was aimed at those mental health nurses who were working in alcohol problem services. Researchers claim that this drug reduces alcohol consumption for those with mild alcohol dependence (Mann *et al.,* 2013). I systematically searched the literature using a rapid review method for this topic and updates on screening and brief intervention for alcohol as the SIPS results had just been published from a probation, emergency departments and primary care settings (Newbury-Birch *et al.,* 2014; Drummond, et al., 2014; Kaner, *et al.,* 2013). The paper was written in four weeks and peer-reviewed before being published.

Contribution

The British Journal Mental Health Nursing is a bimonthly journal that was developed for mental health professionals that deliver a mental health nurse analysis, commentary and clinical reviews on topics central to the practice. My article was aimed at practitioners for the best evidence and practice of brief alcohol interventions, although it did include a short review of two trials for the pharmaceutical drug Nalmefene (Tobutt, 2015). The journal was new at the time. The published paper has been read 59 times according to ResearchGate and there have been readers identified in Academia.eu, plus a downloaded the paper from Toronto, Canada.

Summary

The evidence presented in this chapter regarding two peer-reviewed articles and a book chapter has been focussed on brief alcohol interventions to reduce alcohol consumption for those who are hazardous drinkers. The focus on training for fidelity for alcohol workers in the use of MI brief interventions in a police custody setting used a different tool to that of the MITI 4.2.1 (Moyers, *et al.,* 2014) e.g., the Motivational Interviewing Assessment Supervisory Tools for Enhancing Proficiency (MIA-Step) and had MI skill transfer. On the strength of my paper (Tobutt, 2015) and a paper by Robert Patton (Patton and Boniface, 2015). A colleague from the University of Surrey (UoS) and I were awarded a grant from a start-up research funding stream from UoS. This paper was to assess which is the best novel setting in the criminal justice system for a randomised controlled trial for motivational interviewing brief intervention to reduce alcohol consumption among offenders. In chapters five and six, I provide a methodological critique of my work and draw conclusions.

Chapter 5: Research Development, Methodological Review and Evaluation

Introduction

This chapter critiques methodological issues from the published works I presented in chapters two (Tobutt *et al.,* 1997; Tobutt *et al.,* 1996; Oppenheimer *et al.,* 1994) and four (Tobutt and Milani, 2011. It considers the research theories and stances I adopted at the time of undertaking the research studies and how my thinking changed from that of a health practitioner to a researcher. There is also discussion of research ethics on the published works and the differences and changes in research ethics that have occurred in a 19-year period between the heroin injector cohort study and the complex intervention study. The next section details my reflections on being in transition from a nurse in practice to having a researcher role.

Professional Practice

As in chapter one, I was an Operating Department Assistant (ODA) and then a Registered Nurse in both the adult and mental health fields before moving into a research role in 1990 in the Addiction Research Unit, University of London. During my ODA and nurse training and subsequent updates as a registered practitioner, I had embraced phenomenology as a social theory (Koch, 1995). This approach was used by many nurse researchers over a period as evidenced by articles in the nursing academic journals, and it fits well with the illness experience and perspective (Morgan and Watkins, 1988). It is also relevant to gain an understanding of the patient experience (Sontag, 1977). In nursing, this is pertinent as it led me to focus on an individual's interpretation and experience of their illness as well as developing my professional intuition and tacit knowledge that I gained from practice experience (Burnard, 1989). At the time I was also aware and understood Berger and Luckmann's (1966) social construction of reality theory that was introduced to me during my mental health nurse post-registration training programme. This social theory extended my knowledge base further as I was working with individuals who were psychotic or deluded and it helped me empathise with their experiences.

A change in my thinking occurred while I was a full-time student on the post-graduate diploma in addiction studies programme during the period of 1989 to 1990 while at the Institute of Psychiatry (Belle-Glass and Strang, 1991). I was introduced to the positivist paradigm and experimental research design, as well as mixed methods research methodology (Bulmer, 1984;

Parahoo, 1997). This new knowledge was useful when I started work on the heroin injecting longitudinal follow-up study and in the Motivational Interviewing Brief Intervention feasibility study (Tobutt and Milani, 2011).

Mixed Methods

When I worked at the Addiction Research Unit, it was a multidisciplinary group, working closely together, which was unusual as a research group in the 1990s. For example, there were historians, clinical psychologists, nurses, psychiatrists and social workers. There were always weekly journal club discussions at the unit. These meetings helped my thinking with regards to the official use of documents that we included in the 22-year follow-up study. From the beginning of this study, the original researchers had used a mixed methods approach, i.e., quantifying elements of the personal interview and the use of official documents and data sets such as drug-related deaths, and the Addicts Index (Stimson and Ogbourne, 1970). During the first follow-up (Stimson, et *al.,* 1978) they used both qualitative and quantitative methods, in part to check respondents' responses as the Addicts Index, a national database at the Home Office, had notifications from drug treatment services or GPs if an individual was receiving a diamorphine medical prescription.

The shift in my thinking on social research theory occurred as I began to understand the paradigm because of an MSc in Sociology (Health and Illness) programme. This learning clarified the main social theories that constitute the knowledge base for positivist thought that I read and discussed at the London South Bank University. For example, Comte (Bridges, 1907); Weber (Shills and Finch, 1949) and Durkheim (Halls, 1982). I could see then why a mixed methods approach to the longitudinal study was a way of developing knowledge from both paradigms. Nevertheless, there are legitimate questions as to how longitudinal studies such as the one I was involved with manage to breach the 'third way' of combining both qualitative and quantitative research as there are many assumptions. In the next section, I explore these assumptions, my views at the time and the longitudinal study.

The Assumptions about Longitudinal Research

Most longitudinal research studies assume that people and situations change and that it is worthwhile to describe and chart that change and try to account for it. This assumption has traditionally been related to individual change, e.g., maturation (Winnick, 1962), role change (Nucro, 1998), attitudinal change (Rathod, *et al.,* 2005) and aging (Goldstein and Haerra, 1995).

The 22-year follow-up study did not use these social theories. It reported on individual change but from the external environment and changes in personal circumstances, e.g., the life history. This used political, social, and economic perspectives, as well as the availability of drugs (Maynard, 1989; Strang and Gossop, 1994; Spear, 2002; Marsden *et al.,* 2000). During the period of the second follow-up study, this cohort from 1969 had experienced many changes in drug treatment services due to policy changes (Oppenheimer, *et al.,* 1994; Tobutt *et al.,* 1997). This analysis shifted my thinking to consider political change as a theory that influenced behaviour. One of these drug treatment policy changes was that the prescribing of diamorphine for injecting moved to methadone maintenance prescribing (injecting then oral). In our drug-related death paper (Oppenheimer, *et al.,* 1994), one of the issues was that it was not possible to say that this led to some of the study participants' being ejected from or not accepted onto subsequent detoxification programmes that occurred in the early 1980s. Checking the Addicts Notification system year by year to construct the life chart it was possible to see if a respondent was receiving opiate prescriptions from the taped personal interview responses. However, it was an inaccurate database since it relied on notification by the medical prescriber and there was a time lag from being notified to the Home Office and then be seen on the database. This issue is a problem of the use of official data records.

Longitudinal data can provide information on changes in behaviour as displayed by individuals or groups. Follow-up data can also facilitate the identification of individuals who deviate from the expected pattern of change (Robins and Slobodyan, 2003). For example, in the health-related outcomes of the 22-year follow-up study (Tobutt *et al.,* 1996) only four respondents were found to have developed alcohol dependence which other researchers such as George Valiant asserted that this would be an underestimate. Valiant, proposed that it would be a larger number as they would transfer their drug dependence to alcohol. One of the problems from a methodological point of view is that the dependence syndrome was only proposed in 1976 (Edwards and Gross) and accepted by the World Health Organization in 1982. From a psychological and empirical perspective, the longitudinal study had two very different measurement systems for measuring alcohol problems over the period. The psychological view was the behaviour associated with the frequency and quantity of an individual's alcohol consumption and the empirical view was measuring the dependence syndrome using the Severity of Alcohol Dependence Questionnaire [SADQ] (Stockwell *et al.,* 1979)

It is possible through longitudinal design to look at the situation both before drug use and the consequence of drug use by studying injection drug populations who are deemed at risk. This risk theory was developed by Jessor and Jessor (1978) who suggested that is possible to examine causal relationships about behaviours and conditions at different time points and periods and to observe individual and group changes against a background of social, political and economic change. The 22-year follow-up study did not have this theoretical position. While there were different time periods, no theory was tested as it was not a prospective research study but a retrospective study. However, the same research question had been used in the two cross-sectional time points which were "what happens to drug users over time?" (Tobutt *et al.,* 1997). The retrospective life chart was used to reconstruct the respondents' lives month by month and year by year since their first follow-up in 1976. This dataset was then analysed using quantitative methods, which placed them either into an "off drugs" or "on drugs" category. Again, the problem with this method is the respondent recall, although triangulation was attempted to correct any recall difficulties with any month or year of "on or off drugs" (Denzin, 1989).

All the personal interviews were tape recorded. These would then be transcribed. I did consider whether these interviews should be transcribed verbatim, or whether the dialogue should be reconstructed as some qualitative researchers have argued (Irving and McKenzie, 1988; Fielding, 1993). In the end, for the paper (Tobutt, *et al.,* 1996), I re-constructed the dialogue so that I could quantify some of the health issues. The mortality dataset led me to move my empirical thinking further as the standardised mortality ratio was calculated for the cohort and this allows for comparison with other studies using a mortality ratio as a measure (Oppenheimer, *et al.,* 1994). This result permitted the cohort study to be compared to international studies regarding deaths using the Standard Mortality Ratio (SMR). The higher the SMR in any cohort study, suggests that there is often only one treatment programme available. This issue can lead to drug users leaving the detoxification programme early as they have relapsed back into opiate use and would not then be accepted back into this treatment programme. If there is no long-term opiate substitution therapy, then higher drug-related deaths occur (Farrell and Hall, 2003).

Policy and Government Intervention

The 22-year follow-up study may have helped develop more effective preventative strategies such as the prevention of drug-related deaths (Oppenheimer, *et al.,* 1994). There have been

science-based policy decisions about problem drug use in the United Kingdom (Edwards, 1994). This study (Oppenhiemer *et al.,* 1994), as reported in chapter two is likely to have helped with the development of a prevention programme to lower drug-related deaths in England along with other studies (Hall, 1996; Taylor, *et al.,* 1996). It was used in an influential report to the British Government (Advisory Council on the Misuse of Drugs, 2000) who responded to the report in a positive way (Department of Health, 2001).

Follow-up studies present numerous complex methodological issues to researchers (Bulmer, 1984). About my longitudinal study, the theory of suicide by Durkheim (Halls, 1982) is very relevant as when is a death a drug-related death? Again, this is a problem of both empirical and qualitative research paradigms. For example, one of the deaths that I looked at from the coroner's report was reported as an accidental death. By reading the coroner's report it was stated that the police had found a female body in the river Thames. Nevertheless, questions can be posed. Was the person pushed, in which case the category would be murder or was it suicide as she jumped into the water? My thinking at that time was that there is a problem with the social construction of these categories, but also recognising that death rates can be standardised, measured and compared with other studies from around the world. The study did use a medically defined drug-related death at the time (World Health Organization, 1992) and in Europe, there was a recognition of attempting to standardise drug-related death as there were different measures. This then allows data sets to be compared. However, the latter problem of defining death through the coroner system still can be problematic, as it was in our study with this death in the in the river Thames. The death was recorded as accidental, but equally, it could have also been recorded as suicide, or murder.

The concept of death and drug-related death is problematic. However, despite these issues, several drug-related death cohort studies including the 22-year follow-up study were used in a Home Office report (Advisory Council on the Misuse of Drugs, 2000) that the British government responded to and developed an English drug-related death preventative programme with practice guidance and guidelines (National Treatment Agency for Substance Misuse, 2003a; 2003b; 2003c; 2003d; 2003e; 2004a; 2004b).

Complex Interventions

The motivational interviewing brief intervention feasibility study (Tobutt and Milani, 2011) heralded a further transition from a mixed methods position to an experimental design

framework and empirical testing of a complex intervention. This method was a change to quantitative research methodology and statistical testing. My thinking gravitated towards this empirical paradigm because in part I became interested in how motivational interviewing was coded for proficiency using a tool called the Motivational Interviewing Treatment Integrity [MITI] (Moyers, *et al.,* 2014). This tool had been designed by psychologists and so had been tested and re-tested to measure a practitioner's motivational interviewing skills from coders listening to a 20-minute tape from a practice conversation with a client.

In addition, the feasibility study used a double-blind randomisation of participants into the study to receive either a standard brief intervention or a motivational interviewing brief intervention. I also used an ANOVA test which predicts two-thirds of the variation in the participant's drinking outcomes at 12 weeks (Field, 2005). I soon realised that randomisation is not simply 'coin spinning' procedure as I had previously thought and that it is a highly sophisticated method to avoid inherent human cognitive biases possessed sometimes by researchers.

For the study I needed the alcohol workers to be proficient in delivering this complex intervention during the study. The training of the alcohol workers consisted of 15 hours of motivational interviewing and further training for screening and intervention using the Alcohol Use Disorder Identification Test [AUDIT] (Babor *et al.,* 2001). In the study, I prepared the alcohol workers, but instead of using the MITI, I employed the MIA Step tool (Martino *et al.,* 2006) to assess competency. In part, this was so that the alcohol workers could self-assess their Mi skills themselves. Learning motivational interviewing skills is hard, but this training package was longer than the research shows for basic proficiency (Miller *et al.,* 2004). Proficiency in MI is a level of skill using MI behavioural counts of the practitioner. MI behavioural counts intend to capture the alcohol worker's specific behaviours and how they use them into their use of MI (Moyers, *et al.,* 2014). The alcohol worker submitted a tape after a month of the training, and I also used the MIA-Step tool to assess for competency. It was only when all the alcohol workers were proficient that the trial started. The fidelity could have improved even more if I had assessed MI proficiency during the trial and that is what I leant for future trials.

The other learning point that I took from this study for any future trial is that I would conduct a power calculation before the trial would start as this would indicate the number of participants required in both intervention groups (Faul, *et al.,* 2009).

Ethical Considerations

The Nuremberg code was established in 1947 (Shuster, 1997), which was the basis for modern scientific ethics since the Second World War. The code makes it clear that it is imperative that the individual's consent in any research study is voluntary and that they have the legal capacity to consent, and the freedom to choose. This code helps protect the individual from harm (Thieren and Mauron, 2007). Before the 1960s, few laws regulated research practice in the United Kingdom (Berg and Lune, 2014). The Belmont report (1979) detailed the essential ethical practice for researchers and their ethics committees. This report was respect for the human subject, informed consent, assessment of risk and benefit and attention to how research participants are selected (The National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research, 1979).

The 22-year-follow-up study of heroin injectors was started in 1969 before subsequent ethical codes and practice and legislative Acts of parliament had been implemented, e.g., Belmont (1979) and the Mental Capacity Act (2005). The study did have ethical clearance from the University of London's Research and Ethics Committee. I searched for the respondents in many ways (Oppenheimer, *et al.,* 1994; Tobutt *et al.,* 1996; Tobutt *et al.,* 1997). The primary method was via the National Health Service (NHS) General Practitioner (GP) records. An ethics form was sent to the then Office of Population and Census Service (OPCS), and the study was granted access. If a participant had registered with a GP, then the search would show who their GP was, and this would allow a neutral letter to be sent to their GP with a further sealed envelope addressed to the respondent. The sealed letter was still neutral in tone so as not to indicate that they had a history of injecting drugs with a request to contact us via a unique phone line. This method of tracing participants would not now be allowed under the current NHS ethics guidelines (Health Research Authority, 2017, online) which require a retrospective study to have an indication of the possibility of any follow-up a chance to opt out at the start of the study.

The randomised controlled trial feasibility (RCT) study (Tobutt and Milani, 2011) followed the newer ethics regulations with regards to consent. The RCT only went to the University research

ethics committee because it was being delivered in the criminal justice system and there was no requirement to gain NHS ethics approval. The Mental Capacity Act (2005) was used in the consent process for this study and the alcohol, workers assessed for capacity as a part of the process of the recruitment to the study.

Summary

This chapter has reviewed the methodological research issues from two of the studies that I have included in chapters two and four of this contextual statement. My views regarding social theory have changed since being a nurse practitioner to becoming a researcher because of the type of research that I was engaged in. Both of my studies have methodological limitations. However, some of these were rooted in the nature and requirements of the research at the time and my transition from undertaking primarily qualitative research to adopting a mixed methods approach, and then an experimental empirical paradigm has greatly broadened my methodological horizons. In the next chapter, I will summarise and draw conclusion and will indicate the way forward in developing further research and publications.

Chapter Six: Summary and Conclusion

Introduction

In this final chapter, I will summarise my contextual statement as a practitioner, researcher, and educator. I will conclude with consideration regarding the future of my research career and aspirations for further studies and publications. There are three distinct sections of this chapter. In the first, I reflect in an overarching way about my publications and assess how they have contributed to knowledge and understanding. In the second I reflect on the impact that my published works have had on me as an individual. Finally, I project to the future regarding a possible extension of my research career and production of publications.

Overview of Past Publications

My claim for consideration comprises four research studies (Oppenheimer *et al.,* Tobutt *et al.,* 1996; Tobutt *et al.,* 1997; Tobutt and Milani, 2011), seven contributions to book chapters, editing a book (Trenoweth and Tobutt, 2008; Tobutt, 2011a; 2011b; 2011c; 2011d; 2011e; Lembrechts *et al.,* 2011) and a journal article (Tobutt, 2015). In chapters three and four of this contextual statement, I have detailed my contribution to knowledge and impact of these publications. It can be argued that the book and book chapters have had a different type of impact from the research studies and papers emanating from them. The former has helped me build expertise and familiarity with the literature, which has had a cumulative effect, such that the journal article (Tobutt, 2015) is the culmination of my knowledge and understanding of alcohol and brief alcohol interventions and treatment. A further impact from all my publications has been the ability to translate my research findings and book chapters into teaching material in Higher Education. I was able to use it in programmes I was involved with for specialist treatment practitioners, nurses and other healthcare professionals. This experience enabled the learning activities I designed, whether face to face or blended learning, to be current and evidence-based so that learners could develop in their practice, research and policy aspects of their work.

Professional Development

As well as the contribution and impact that my published works in the public domain have had (as detailed in this contextual statement) there have been significant implications for myself from the beginning of my publishing endeavours to the current time. This impact has been

personal as well as professional. Before to the 22-year follow-up study, I had no publications as my focus was that of a nurse practitioner. The first journal paper (Oppenhiemer *et al.,* 1994) was written with co-authors, who were at a distance, having moved from the Addiction Research Unit. This article gave me an experience of writing with a group of researchers who were not 'on-site,' and I was responsible for submitting the resulting manuscript. Two other publications followed in short succession (Tobutt *et al.,* 1996; Tobutt *et al.,* 1997). Since the last publication (Tobutt, 2015) I have been writing funding applications including for the Motivational Interviewing (MI) study.

A further impact of my research is that I have become an expert MI trainer and have had the opportunity to develop others in practice, including at an international level. For example, I have recently delivered an MI introductory workshop in Qatar.

My Work Roles

My contribution to the translation of practice, education and research developed because of the experiences acquired in different roles and their complexity. I was able to move between complex roles with regards to practice education and research. The 'knowing' and being able to give advice, motivate and develop policy with regards to psychoactive drug use and problem psychoactive drug use grew from these various experiences over time. This ability to translate practice, research and policy have impacted on my publications, work and roles. I have moved from being a practitioner, researcher, and educator to be able to advise policy developers both at international, national and local levels.

Learning

The deeper meaning and new learning have been from my different work roles and experiences in policy, practice and education. The learning has been from being able to observe, discuss and develop different types of skills that are behind the questions and answers that Gadamer (2004) argued is both logical and experiential. The new learning is how I have been able to move between nursing, research, higher education and policy in terms of knowing how to behave, think and offer advice where appropriate. The central theme that weaves all my work together has been substance use disorders. I am a professional nurse that has transferable skills and I learnt how these could be used in different roles and settings such as research and this is extended into policy. However, at each stage in a new role I learnt new skills that built upon those I had already.

The Future

Working with a researcher (a psychologist) at the University of Surrey who I first met at the National Addiction Centre, King's College London, we made a successful grant application for a pump-priming research fund at Surrey. This funding of £10,000 enabled us to employ a research assistant for a project to ascertain a novel setting in the criminal justice system to deliver a rigorous randomized controlled trial using motivational interviewing brief intervention to reduce alcohol consumption. We interviewed key informants from all the settings in the Criminal Justice System (CJS) in England and used a rapid literature review method to identify the novel research setting. This setting was in the youth justice for young people (Gamblin e*t al.,* 2017). At the time of writing, we have just completed the review paper and have submitted to a peer reviewed-journal.

I have given a poster presentation talk of the paper at the International Conference of Motivational Interviewing in June 2017 and at the Estonian Motivational Interviewing group (Tobutt, *et al.,* 2017a; 2017b). The next step is to undertake a systematic literature review on the efficacy of MI training and proficiency and publish the paper. Then we will approach our other research partner in public health (criminal justice) and develop a grant application for a feasibility study before moving to a full randomised controlled trial. The funding application is aimed at the National Institute of Health Research (NIHR).

Conclusion

This contextual statement has identified the impact of my published works in the public domain covering a time span of 27 years. It has mapped my career from its early beginnings as a practitioner to my current position and has presented 11-published works that demonstrate my involvement with the topic of alcohol and drugs in research, policy and practice fields, my contribution and impact. Along this pathway, my own learning and development as a researcher have been made apparent.

While writing the 22-year follow-up papers in the 1990s, I was already working on the alcohol prevention policy that followed a 15-year period of training, consultancy and policy development. During the 1990s and the 2000s, brief alcohol interventions have been my interest. This interest alongside my role in delivering motivational interviewing training to health professionals since 1992. I have used a total of 11 pieces of work across three themes as

a basis for my claim for a PhD by published works in the public domain, linking them to how they can be translated into policy and practice in the health perspective.

References

Abbots, K. (2017) Email to Clive Tobutt, 30 May. 17

Advisory Council on the Misuse of Drugs (2016) *Reducing Opioid-Related Deaths in the UK.* London: The Stationery Office. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/576560/ACMD-Drug-Related-Deaths-Report-161212.pdf [Accessed 3rd May, 2017].

Advisory Council on the Misuse of Drugs (2000) *Reducing Drug-related Deaths: A Report by the Advisory Council on the Misuse of Drugs*. London: The Stationery Office.

Advisory Council on the Misuse of Drugs (1999) *Prevention Working Group* London: Home Office.

Aharonovich, E., Hatzenbuehler, M., Johnston, B., O'Leary, A., Morgenstern, J., Wainburg, M., Yao, P., Helzer, J., and Hasin, D. (2006) A low-cost, sustainable intervention for drinking reduction in the HIV primary care setting. *AIDS Care,* 18(6), 561-568.

Amazon (2017a) Alcohol at Work: Managing Alcohol Problems and Issues in the Workplace. Available from: *https://www.amazon.co.uk/Alcohol-Work-Managing-Problems-Workplace/dp/0566086948* [Accessed May 30th, 2017].

Amazon (2017b) Identification and Treatment of Alcohol Dependency. Available from: *https://www.amazon.co.uk/Identification-Treatment-Alcohol-Dependency-Professor-ebook/dp/B004FN1VR4/ref=sr_1_1?ie=UTF8&qid=1499616084&sr=8-1&keywords=colin+martin+alcohol* [Accessed July 9th, 2017].

Antony, J., Warner, L., and Kessler, R. (1994) Comparative epidemiology of dependence on tobacco, alcohol, controlled substances and inhalants: basic findings from the National Comorbidity Survey. *Experimental and Clinical Pharmacology,* 2, 244-268.

Babor, T., and Higgins-Biddle, J. (2001) *Brief Intervention for Hazardous and Harmful Drinking. A Manual for use in Primary Care*. New York: World Health Organization.

Babor, T., Higgins-Biddle, J., Saunders, J., and Monterio, M. (2001) *AUDIT. The Alcohol Use Disorders Identification Test. Guidelines for Use in Primary Care.* 2nd Edition, Geneva, World Health Organization.

Bandura, A. (1997). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Belle-Glass, I., and Strang, J. (1991) Professional training in substance abuse: the UK experience. In: Belle-Glass, I. (ed.) *The International Handbook of Addiction Behaviour.* London: Tavistock/Routledge.

Benner. P. (1984) *From Novice to Expert, Excellence and Power in Clinical Nursing Practice.* Addison-Wesley Publishing Company.

Berg, B., and Lune, H. (2014) *Qualitative Research Methods. Eighth Edition.* Harlow: Pearson Education Limited.

Berger P., and Luckmann, T. (1966) *The Social Construction of Reality. A Treatise in the sociology of Knowledge.* London: Penguin Books.

Bien, T., Miller, W., and Tonigan, J. (1993) Brief interventions for alcohol problems: A review. *Addiction,* 99, 315-316.

Bijl, R., Lambrechts, M-C., and Shahandeh. (2011) Workplace testing in: In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower Publishing Ltd.

Blaxter, L., Hughes, C., and Tight, M. (2001) *How to Research.* Buckingham: Open University Press.

Brecht, M., and Anglin, M. (1990) Conditional factors of maturing out: Legal supervision and treatment. *International Journal of the Addictions,* 25(4), 393-407.

Bridges, M. (1907) *A General View of Positivism. Translated from the French Auguste Comte.* George Routledge and Sons Limited.

Brunton, G., Stansfield, C., and Thomas, J. (2012) Finding relevant studies. In: Gough, D., Oliver, S., and Thomas, J. (eds.) *An Introduction to Systematic Reviews.* London Sage.

Bulmer, M. (1984) *Sociological Research Methods.* Second Edition. London: Routledge.

Burnard, P. (1985) *Learning Human Skills.* London: Butterworth-Heinemann.

Cabinet Office (2004) *Alcohol Harm Reduction-Reduction Strategy for England.* London. The Cabinet Office.

Cartesian Meditations (1999) *An Introduction to Phenomenology. Husserl E., trans.* Dordrecht: Kluwer Academic.

Campbell, J. (1980) The relationship of nursing and elf-awareness. *Advances in Nursing Science,* 2(4), 15-26.

Caulkins, J., and Reuter, P. (2016) Dealing more effectively and humanely with illegal drugs. Crime and Justice, online, Available from: *http://www.journals.uchicago.edu/doi/abs/10.1086/688458*. (Retrieved 2nd April 2017)

Clinical Guidelines on Drug Misuse and Dependence Update 2017 Independent Expert Working Group (2017) *Drug Misuse and Dependence: UK Guidelines on Clinical Management.* London: Department of Health

Cole, S., McMaster, F., Kaplan, S., and Tobutt, C., (2011) Motivational interviewing: The evidence and the promise. Symposium 1130, *American Psychosomatic Society,* 69th Annual Scientific Meeting, March 9-12, San Antonio, Texas, USA.

Collaborating Centre for Mental Health (2008) *Opioid Detoxification. National Clinical Practice Guideline Number 52.* London: The British Psychological Society and The Royal College of Psychiatrists.

College of Operating Department Practitioners (2008) *The Diploma in Higher Education in Operating Department Practice. Curriculum Document 2006.* London: College of Operating Department Practitioners.

Commission on Narcotic Drugs (2010) New challenges, strategies and programmes in demand reduction. *Commission on Narcotic Drugs, 53rd Session*. Vienna, March 8th to 12th, 2010. Commission on Narcotic Drugs.

Cooperativa di Studio e Ricerca Sociale Marcella (1988) *Ideas and Proposals of Intervention on Drug Addiction in the Workplace.* Milan: Milan City Council and Province.

Crown, J. (1998) *Review of Prescribing Supply and Administration of Medicines under Group Protocols — The Crown Report.* April 1998. Department of Health: London

Darke, S., Degenhardt, L., and Mattick, R. (2007) *Mortality amongst Illicit Drug Users. Epidemiology, Causes and Intervention.* Cambridge: Cambridge University Press.

Denzin, N. (1989) *The Research Act: A Theoretical Introduction to Sociological Methods.* Third Edition. Englewoods Cliffs: Prentice Hall.

Departmental Committee on Morphine and Heroin (1926) *Morphine and Heroin.* London: H.M. Stationery.

Department of Health (2016) *Alcohol Guidelines Review – Report from the Guidelines Development Group to the UK Chief Medical Officers.* Available from: *www.gov.uk/government/uploads/system/uploads/attachment˙data/file/489797/CMO˙Alcohol˙Report.pdf.* [Accessed 29th May 2017].

Department of Health. (2013). *Public Health Responsibility Deal*. London: Department of Health.

Department of Health (2007) *Safe, Sensible, Social: The Next Steps in the National Alcohol Strategy.* London: The Stationery Office.

Department of Health (2005) *Mental Capacity Act 2005*. London: The Stationery Office.

Department of Health (2001) *The Government Response to the Advisory Council on the Misuse of Drugs Report into Drug Related Deaths.* London: Department of Health.

Department of Health (1999) *Drug Misuse and Dependence – Guidelines on Clinical Management.* London: The Stationery Office.

Di Martino, V., Gold, D., and Schaap, A. (2002) *SOLVE: Managing Emerging Health-Related Problems at Work.* Geneva: International Labour Organization.

Dole, V., and Nyswander, M. (1965) A medical treatment for diacetyl morphine (heroin) addiction. A clinical trial with methadone hydrochloride. *Journal of the American Medical Association,* 193, 646-650. PMID 14321530 DOI: 10.1001/jama,1965.03090080008002.

Drummond C., Deluca P, Coulton S, Bland M, Cassidy P, Crawford M, Dale V, Gilvarry E, Godfrey C, Heather N, McGovern R, Myles J, Newbury-Birch D, Oyefeso A, Parrot S, Patton R, Perryman K, Phillips T, Shepherd J, Touquet R, & Kaner E. (2014) The effectiveness of alcohol screening and brief intervention in emergency departments: A multi-centre pragmatic cluster randomized controlled trial. *PLoS ONE,* 9(6): e99463. Doi:10.137/journal.pone.0099463.

Drummond, C., Oyefeso, A., Phillips, T., Cheeta, S., Deluca, P., Perryman, K., and Christoupoulos, A. (2004). *Alcohol Needs Assessment Research Project (ANARP). The 2004 National Needs Assessment for England*. London: Department of Health and the National Treatment Agency.

Drummond, C. (1990) The relationship between alcohol dependence and alcohol related problems in a clinical population. *British Journal of Addiction,* 85, 357-366.

Edwards, G, (1991) Teaching research skills. In: Belle-Glass, I. (ed.) *The International Handbook of Addiction Behaviour.* London: Tavistock/Routledge.

Edwards, G. (1984) Drinking in a longitudinal perspective: career and natural history. *British Journal of Addiction,* 79, 175-183.

Edwards, G. (1981) The Home Office Index as a basic monitoring system. In: Edwards, G., and Busch, C. (Eds*.) Drug Problems in Britain: A Review of Ten Years.* London: Academic Press.

Edwards, G., Arif, A., and Hodgson, R. (1981) Nomenclature and classification of drug and alcohol-related problems: a WHO memorandum. *Bulletin of the World Health Organization,* 59, 225-242.

Edwards, G., Gross, M., Keller, M., Moser, J., and Room, R. (1977) *Alcohol Related Disabilities.* World Health Organization Offset Publication 32, Geneva: WHO.

Edwards, G., and Gross, M. (1976) Alcohol dependence: provisional description of a clinical syndrome*. British Medical Journal,* 1: 1058-1061.

Edwards, G. (1969) The British approach to the treatment of heroin addiction. *Lancet,* i,768.

Egan (1975) *The Skilled Helper: A Model for Systematic Helping and Interpersonal Relating.* London: Cole.

Egan (1986) *The Skilled Helper: A Systematic Approach to Effective Helping*. 3rd edn. London: Cole.

Eastman, C., and Maguire, K. (2016) Critical autobiography in the professional doctorate: improving students' writing through the device of literature. *Studies in Continuing Education,* 38: 3, 355-372, DOI: 10.1080/05180337X.2016.

Farrell, M., and Hall, W. (2003) Methadone and opioid-related deaths: changing prevalence over time. In: Tober, G., and Strang, J. (eds.) *Methadone Matters. Evolving Community Methadone Treatment of Opiate Addiction.* London: Martin Dunitz.

Faul, F., Erdfelder, E., Buchner, A., and Lang, A-G. (2009) Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses*. Behavior Research Methods,* 41(4), 1149-1160.

Field, A. (2005) *Discovering Statistics Using SPSS.* London: Sage Publications.

Fielding, N. (1993) Qualitative interviewing. In: Gilbert, N. (ed.) *Researching Social Life.* London: Sage.

Fischer, R. (1922) On the interpretation of $x^2$from contingency tables and the calculation. *Journal of the Royal Statistical Society,* 85(1), 87-94.

Frick, B. (1971) *Humanistic psychology: Conversations with Abraham Maslow, Gardner Murphy, Carl Rogers.* Bristol: Wyndham Hall Press.

Frischer, M. (1997) Estimating the prevalence of drug abuse using the mortality multiplier method: An overview. In: Stimson, G., Hickman, M., Quirk, A., Frischer, M., and Taylor, M. (eds.) *Estimating the Prevalence of Problem Drug Use in Europe.* Luxembourg: European Monitoring Centre for Drugs and Drug Addiction.

Gadamer, H-G, (2013) *Truth and Method.* Second Edition. London: Bloomsbury Press.

Gale, D. (1999) Address to the Fourth International Private Sector Conference on Drugs in the Workplace and the Community. *Fourth International Private Sector Conference on Drugs in the Workplace and Community.* Sundsvall, Sweden, 10th May 1999. United Nations on Drugs, Crime and Prevention, and the International Labour Organization.

Gamblin, D., Tobutt, C., and Patton, R. (2017*) Alcohol Identification and Brief Advice in England's Criminal Justice System. A Report.* Guildford: University of Guilford.

Gärdegård, N. (2004) *Workplaces against Drugs. The Sundsvall Experience.* Härnősand: Norra Forlaget.

Gärdegärd, N., and Eriksson, J. (2011) Communities and employers working together. In: Tobutt, C., (ed.) (2011) *Alcohol at Work: Managing Alcohol Problems and Issues in the Workplace.* Farnham, Surrey: Gower Publishing Ltd.

Ghodse, H. (ed.) (2005) *Addiction at Work. Tackling Drug Use and Misuse in the Workplace.* Aldershot: Gower.

Gibbs, G. (1988) *Learning by Doing: A Guide to Teaching and Learning Methods.* Oxford: Oxford Further Education Unit.

Glatt, M. (1966) A review of the Second Report of the Interdepartmental Committee on Addiction, *Bulletin on Narcotics,* 18(2), 29.

Gold, D., and Caborn, J. (2005) Addressing psychosocial problems at work – *SOLVE.* In: Ghodse, H., (ed.) (2005) *Addiction at Work: Tackling Drug Misuse in the Workplace* Farnham, Surrey: Gower.

Goldstein, A., and Haerra, J. (1995) Heroin addicts and methadone treatment in Albuquerque: a 22-year follow-up*. Drug and Alcohol Dependence,* 40(2): 139-50.

Gordon, T. (1970) *Parent Effectiveness Training.* New York: Wyden.

Gourney, S. (2014) Email to Clive Tobutt. 13th January 2017.

Gossop, M., Green, L., Phillips, G., and Bradley, B. (1989) Lapse, relapse and survival among opiate addicts after treatment: A prospective follow-up study. *British Journal of Psychiatry,* 154, 348-353.

Graham, H. (1989) The changing patterns of women's smoking. *Health Visiting,* 62(1), 11-24.

Halls, W. (1982) *Rules of Sociological Method and selected Texts on Sociology and its Methods. Translated by W., Halls.* London: Free Press.

Health Improvement Analytical Team, and Department of Health (2008) *The Cost of Alcohol Harm to the NHS in England: An Update to the Cabinet Office (2003) study.* London: Department of Health.

Health Research Authority (2017) *HRA Approval.*
Available from: *http://www.hra.nhs.uk/about-the-hra/our-plans-and-projects/assessment-approval/*
[Accessed 18th May, 2017].

Heron, J. (1976) A six-category intervention analysis. *British Journal of Guidance and Counselling,* 4(2), 143-155.

Hines, L., Lynskey, M., Moreley, M., Griffiths, P., Gossop, M., Powis, B., and Strang J. (2017) The relationship between initial route of heroin administration and speed of transition to daily heroin use. *Drug and Alcohol Review, 3,* DOI:1-.111/dar. 12560.

Hodgson, R., Alwyn, T., John, B., Thom, B., and Smith, A. (2002) The FAST alcohol screening test for alcohol problems. *Alcohol and Alcoholism,* 37(1), 61-66.

Home Office (2012) *Evaluation of Alcohol Arrest Referral Pilot Schemes* (Phase 2). London: The Stationery Office.

Home Office (2009) *Coroner and Justice Act 2009.* London: The Stationery Office.

Home Office (2003) *Death Certification and Investigation in England, Wales and Northern Ireland. The Report of a Fundamental Review 2003*. London: The Stationery Office.

Home Office (2002) *Certifying and Investigating Deaths in England, Wales and Northern Ireland. An Invitation for Views.* London: The Stationery Office.

Home Office (1998) *Tackling Drugs to Build a Better Britain.* London: The Stationery Office.

Home Office (1995) *Tackling Drugs Together.* London: The Stationery Office.

Home Office (1993) *Communication for Grant RPU, 1993, RP 92 2/108/1.* London Home Office Drugs Research Unit.

Home Office (1971) *Misuse of Drugs Act 1971.* London: HM Stationary Office.

Home Office (1989) *Official Secrets Act, 1989.* London: HM Stationery Office.

Home Office (1920) *Dangerous Drugs Act 1920.* London: HM Stationary Office.

Hser, Y., Evans, E., Grella, C., Ling, W., and Anglin, D. (2015) Long-term course of opioid addiction. *Harvard Review of Psychiatry,* 23(2), 76-89.

Hsu, T. (2011) Los Angeles Times 5th-largest newspaper, circulation report says. *Los Angeles Times,* November 2nd, 2011. Available from: http://articles.latimes.com/2011/nov/02/business/la-fi-newspaper-circulation-20111102 [Accessed: May 30th, 2017].

Interdepartmental Committee on Drug Addiction (1965) *Second Report.* London: HM Stationary Office.

Inter-departmental Committee on Drug Addiction (1961) *First Report.* London: HM Stationary Office.

International Labour Office (2017) Promoting Jobs Protecting People. Available from: http://ilo.org/global/about-the-ilo/who-we-are/international-labour-office/lang--en/index.htm [Accessed 23rd May, 2017].

International Labour Organization (2003) *Alcohol and Drug Problems at Work. The Shift to Prevention.* Geneva: International Labour Office.

International Labour Organization (2000) *Facts on SafeWork.* Geneva: International Labour Office.

International Labour Organization (1996) *Management of Alcohol – and Drug-related Issues in the Workplace*. Geneva: International Labour Office.

International Labour Office (1994) *International Labour Conference 259th Session.* Geneva: International Labour Organization.

International Labour Organization and United Nations International Drugs and Crime Programme (1999) *Fourth International Private Sector Conference on Drugs in the Workplace and Community.* Sundsvall, Sweden, May 9th to 12th 1999. International Labour Organization and United Nations International Drugs, Crime and Programme, and the International Labour Organization.

International Labour Organization and United Nations International Drugs and Crime Programme (1997) An International Perspective on private sector collaboration in drug abuse demand reduction. *Third International Private Sector Conference on Drugs in the Workplace and the Community,* Petaling Jaya, Malaysia, October 3rd to 6th 1997. International Labour Organization and United Nations International Drugs and Crime Programme

International Labour Organization and United Nations International Drugs and Crime Programme (1995) Report of the Second International Private Sector Conference on Drugs in the Workplace and the Community. *Second International Private Sector Conference on Drugs in the Workplace and the Community.* Porto Alegre, Brazil, April 24th to 26th 1995. International Labour Organization and United Nations International Drugs and Crime Programme

Irving, B., and McKenzie, I. (1988) *Regulating Custodial Interviews.* London: Police Foundation.

Jacobson, J., and Sacco, P. (2012) Employee assistance program services for alcohol and other drug problems: implications for increased identification and engagement in treatment. *American Journal of Addictions/American Academy of Psychiatrists in Alcoholism and Addictions,* 21(5), 468–475.

Jaffe, J., and Martin, W. (1990) Opioid analgesics and antagonists. In: Gillman, T., Nies, A., and Taylor, P. (eds.) *Goodman and Gilman's The Pharmacological Basis of Therapeutics.* New York, Pergamon Press.

Jaffe, J. (1991) Opiates. In: Belle-Glass, I. (ed.) *The International Handbook of Addiction Behaviour.* London: Routledge.

Jessor, R., and Jessor, S. (1978) Theory testing in longitudinal research on marijuana use. In: Kandel, D. (ed.) *Longitudinal Research on Drug Use.* Washington, D.C.: Hemisphere Halsted-Wiley.

Kandel, D., Yamaguchi, K., and Chen, K. (1992) Stages of progression in drug involvement from adolescence to adulthood: further evidence for the gateway theory. *Journal Studies on Alcohol,* 53(5), 447-457.

Kaner E, Bland M, Cassidy P, Coulton S, Dale V, Deluca, P., Gilvarry, E., Godfrey, C., Heather, N., Myles, J., Oyefeso, A., Parrot, S., Perryman, K., Phillips, Shepherd, J., and Drummond, C. (2013) Pragmatic cluster randomized controlled trial of the effectiveness and cost-effectiveness of screening and brief alcohol intervention in primary care in England. *British Medical Journal,* 346: e8501.

Kaner, E., Dickinson, H., Beyer, F., Pienaar, E., Schlesinger, C., Campbell, F., Saunders, J., and Heather, N. (2009). The effectiveness of brief alcohol interventions in primary care settings: a comprehensive review. *Drug and Alcohol Review, 28*, 301-323.

Karch, A., Sheader, L., Speake, T., and Griffiths, C. (2010) *Focus on Nursing Pharmacology.* Philadelphia: Lippincott Williams and Williams, a Wolters Kluwer Business.

Kock, T. (1995) Interpretative approaches in nursing research: the influence of Husserl and Heidegger. *Journal of Advanced Nursing,* 21: 827-836.

Kubler-Ross, E. (1969) *On Death and Dying.* London: Macmillan.

Lambrechts, M-C., Tobutt, C. and Bijl, R. (2011c) How to deal with the (problematic) use of alcohol in relation to job performance. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower Publishing Ltd.

Laranjeira, R. (1994*) Alcohol Dependence Syndrome. Measurement of Altered Behavioural, Subjective and Psychobiological States,* Unpublished PhD thesis, University of London Faculty of Medicine.

Lingford-Hughes, A., Welch, S., Peters, L., Nutt, D.; British Association for Psychopharmacology, Expert Reviewers Group (2012) BAP updated guidelines: evidence-based guidelines for the pharmacological management of substance abuse, harmful use, addiction and comorbidity: recommendations from BAP. *Journal of Psychopharmacology,* 26(7), 899-952.

Lim, S., Vos, T., Flaxman, A., *et al.,* (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet, 380*, 2224-2260.

Lloyd, W. (2011) Policy development for organisations. In: Tobutt, C. (ed.) *Alcohol and The Workplace.* Farnham: Gower Publishing Ltd.

Lovrecic, M., Lovrecic, C, Semer, J., and Maremmani, I. (2016) The filing of addicted patients at addiction units is correlated with a reduction in mortality due to illicit opioids, but also to prescribed opioids and other substances of abuse. *Heroin Addiction and Related Clinical Problems,* 18(3), 1-12.

McPhearson, A., Benson, G., and Forrest, E. (2012) Appraisal of the Glasgow assessment and management of alcohol guideline: a comprehensive alcohol management protocol for use in general hospitals. *Quality Journal of Medicine,* 105, 649-656.

Man, L., Best, D., Gossop, M., Stillwell, G., and Strang, J. (2004) Relationship between prescribing and risk of opiate overdose among drug users in and out of maintenance treatment. *European Addiction Research,* 10(1), 35-40.

Margeson, C., and Trenoweth, S. (2010) Epidemiology and aetiology of long-term conditions. In: Margeson, C., and Trenoweth, S. (eds.) *Developing Holistic Care for Long-Term Conditions.* London: Routledge.

Margeson, C., Trenoweth, S., and Worledge, J. (2010) In: Margeson, C., and Trenoweth, S. (eds.) *Developing Holistic Care for Long-Term Conditions.* London: Routledge

Marsden, J., Gossop, M., Stewart, D., Rolfe, A., and Farrell, M. (2000). Psychiatric symptoms amongst clients seeking treatment for drug dependence: intake data from the National Treatment Outcome Research Study. *British Journal of Psychiatry,* 176, 285-289.

Martin, C. (ed.) (2008) *Identification and Treatment of Alcohol Dependency.* Keswick: M&K Publishing.

Martin, C. (2007) Email to Steve Trenoweth and Clive Tobutt, 21 January 2007.

Martino, S., Ball, S., Nich, C., Canning-Ball, M., Rounsaville, B., and Carroll, K. (2011) Teaching community programme clinicians motivational interviewing using expert and train-the-trainer strategies, *Addiction,* 106, (20, 428-441.

Martino, S., Ball, S.A., Gallon, S.L., Hall, D., Garcia, M., Ceperich, S., Farentinos, C., Hamilton, J., and Hausotter, W. (2006) Motivational Interviewing Assessment: Supervisory Tools for Enhancing Proficiency. Salem: Northwest Frontier Addiction Technology Transfer Center, Oregon Health and Science University.

Maynard, A. (1989) The costs of addiction and the costs of control. In: Robinson, A., Maynard, A., and Chester, R. (eds.) *Controlling Legal Addictions.* London: Macmillan.

Miller, W., and Rollnick, S. (2013) *Motivational Interviewing. Helping People Change.* London: Guildford Press.

Miller, W., Moyers, T., Arcinega, L., Ersnt, D., and Forcehimes, A. (2005) Training, supervision and quality monitoring of the COMBINE study behavioural interventions. *Journal Studies on Alcohol, 66(supplement 15),* S188-S195.

Miller, W., Yahne, C., Moyers, T., Martinez, J., and Pirritano, M. (2004) A randomised trial of methods of to help clinicians learn motivational interviewing. *Journal of Consulting and Clinical Psychology,* 72(6), 1050-1062.

Miller, K. (2005) *Communication Theories: Perspectives, Processes and Contexts.* Maidenhead: McGraw-Hill.

Mitchel, M., and Veitch, B. (2000) Responsibility for controlled drugs in operating departments. *Theatre Nursing,* 9(17), 1139-1143.

Morgan, M., and Watkins, C, (1988). Managing hypertension: beliefs and responses to medication among cultural groups. *Sociology of Health and Illness,* 10(4): 561-578.

Moyers, T., Manuel, J., and Ernst, D. (2014). *Motivational Interviewing Treatment Integrity Coding Manual 4.1.* Unpublished manual.

Moyers, T., Manuel, J., Wilson, P., Hendrickson, S., Talcott, W., and Durand, P. (2008) A randomised trial investigating training in motivational interviewing for behavioural health providers. *Behavioural and Cognitive Psychotherapy,* 36(2), 149-162.

Moyers, T., Martin, T., Manuel, J., Hendrickson, S., and Miller, W. (2005) How does motivational interviewing work? Therapist interpersonal skills predicts client involvement within motivational interviewing sessions. *Journal of Consulting and Clinical Psychology,* 73, 590-598.

National Audit Office. (2008). *Reducing Alcohol Harm: Health Services in England for Alcohol Misuse.* London: The Stationary Office (TSO).

National Collaborating Centre for Mental Health (2008) *Drug Misuse. Opioid Detoxification.* London: The British Psychological Society and the Royal College of Psychiatrists.

National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (1979) *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.* Washington: DHEW Publication. Available from: https://videocast.nih.gov/pdf/ohrp_appendix_belmont_report_vol_2.pdf [Accessed 18th May, 2017].

National Health Service Digital (2017) *Statistics on Alcohol, England, 2017.* London: National Statistics, 3rd May 2017.

National Institute for Health and Care Excellence (2007) *Methadone and Buprenorphine for the Management of Opioid Dependence.* London: National Institute for Health and Care Excellence

National Treatment Agency for Substance Misuse (2004a) *Overdose: Everything You Need to Know.* London: NTA.

National Treatment Agency for Substance Misuse (2004b) *Injecting and Infections: What You Need to Know.* London: NTA.

National Treatment Agency for Substance Misuse (2003a) *Reducing Drug-Related Deaths: Guidance for Drug Treatment Providers*. London: NTA.

National Treatment Agency for Substance Misuse (2003b) *Promoting Safer Drinking: A Briefing Paper for Drug Workers.* London: NTA.

National Treatment Agency for Substance Misuse (2003c) *Commissioning Services to Reduce Drug-Related Deaths*. London: NTA.

National Treatment Agency for Substance Misuse (2003d) *Drug Overdose: Prevention and Response. Guidance for Help lines*. London: NTA.

National Treatment Agency for Substance Misuse (2003e) *Drug Overdose: Prevention and Response. Guidance for Help lines*. London: NTA.

National Treatment Agency for Substance Misuse (2002) *National Treatment Agency for Substance Misuse.* London: National Treatment Agency for Substance Misuse.
New Books (2009) *Addiction,* 104: 679–680. doi:10.1111/j.1360-0443.2009.02553.x

Newbury-Birch D, Coulton S, Bland M Cassidy, P., Dale, V., Deluca, P., Gilvarry, E., Godfrey, C., Heather, N., Kaner, E., McGovern, R., Myles, J., Oyefeso A., Parrot, S., Patton, R., Perryman, K., Phillips, T., Shepherd, J., Drummond, C. (2014) Alcohol screening and brief interventions for offenders in the probation setting (SIPS Trial): a pragmatic multi centre cluster randomised controlled trial. *Alcohol Alcohol*ism, 49:540-48.

Norman, J. (2010) Email to Clive Tobutt, 30 January 2010.

Nucro, D. (1998) A long-term programme of research on drug use and crime. *Substance Use and Misuse,* 33(9), 1817-1837.

Nursing and Midwifery Council (2017) *The Code. Professional Standards of Practice and Behaviour for Nurses and Midwives.* London: Nursing and Midwifery Council.

Oppenheimer, E., Tobutt, C., Taylor, C., and Andrews, T. (1994) Death and survival in a cohort of heroin addicts at London clinics: A 22-year follow-up study. *Addiction,* 89: 1299-1308.

Oppenheimer, E., Stimson, G., and Thorley, A. (1979) Sever-year follow-up of heroin addicts: abstinence and continued use compared. *British Medical Journal,* 2, 627-630.

Oppenheimer, E., and Stimson, G. (1982) Seven-year follow-up of heroin addicts: life histories summarised. *Drug and Alcohol Dependence,* 9(2), 153-159.

Parahoo, K. (1997) *Nursing Research. Principles, Process and Issues.* London: Macmillian.

Rathod, N., Addenbroke, W., and Rosenbach A. (2005) Heroin dependence in an English town: 33-year follow-up. *British Journal of Psychiatry,* 187, 421-425.

Patton, R., and Boniface, S. (2015) Prevalence of hazardous drinking among 18-35-year olds; the impact of a revision to the AUDIT score. *Alcohol and Alcoholism,* 51(3), 281-281. Doi: *doi.org/10.1093/alcalc/agv115*.

Plan Nacional sobre Drogas of Spain and United Nations International Drugs and Crime Programme (1993) Report of the Second International Private Sector Conference on Drugs in the Workplace and the Community. *First International Private Sector Conference on Drugs in the Workplace and the Community.* Seville, Spain, October 13th to 15th 1993. Plan Nacional sobre Drogas of Spain and United Nations International Drugs and Crime Programme.

Poikolainen, K., Paljarvi, T., and Makela, P. (2007). Alcohol and the preventive paradox: serious harms and drinking patterns. *Addiction, 102*(4), 571-578.

Preston, A., and Bennet, G. (2003) The history of methadone and methadone prescribing. In: Strang J., and Tober, G. (Eds.). *Methadone Matters. Evolving Community Methadone Treatment of Opiate Addiction.* London: Martin Dunitz, an Imprint of the Taylor and Francis Group.

Public Health England (2017) *Drug Misuse and Dependence – Guidelines on Clinical Management.* London: Department of Health.

Rang, P., Ritter, M., Flower, J., and Henderson, G. (2016) Rang and Dale's Pharmacology. Eighth Edition. London: Elsevier Churchill Livingstone.

Raistrick, D. (1991) Career and natural history. In: Belle-Glass, I. (Ed.) *Addiction Behaviour.* London: Routledge.

Rathod, N., Addenbroke, W., and Rosenbach A. (2005) Heroin dependence in an English town: 33-year follow-up. *British Journal of Psychiatry,* 187, 421-425.

Robins, L., and Slobodyan, S. (2003) Post-Vietnam heroin use and injection by returning veterans: clues to preventing injection today. *Addiction,* 98(8), 1053-1060.

Robins, L., Helzer, J., and Davis, D. (1975) Narcotic use in Southeast Asia and afterward. An interview study of 898 Vietnam returnees. *Archive of General Psychiatry,* 32(8), 955-961.

Robins, L., Davis, D., and Nurco, D. (1974) How permanent was Vietnam drug addiction? *American Journal of Public Health,* 64(1 Supplement), 38-43.

Roberts, M. (2017) E-mail to Clive Tobutt, July 2017. Issue 2. Art. No.: CD004148. Doi: *10.1002/14651858.CD004148.pub3.*

Rogers, Carl. (1970). *On Encounter Groups*. New York: Harrow Books, Harper and Row.

Rogers, Carl. (1961). *On Becoming a Person: A Therapist's View of Psychotherapy*. London: Constable.

Rossow, I., and Romelsjo, A. (2006). The extent of the 'prevention paradox' in alcohol problems as a function of population drinking patterns. *Addiction,* 101(1), 84-90.

Royal Society for the Prevention of Accidents (RoSPA) (2011) Book Reviews. Alcohol at Work. *The RoSPA Occupational Safety and Health Journal,* 14th December 2011, 14.

Saunders, J., and Lee, N. (2000). Hazardous alcohol use: Its delineation as a subthreshold disorder, and approaches to its diagnosis and management. *Comprehensive Psychiatry,* 41(2), 95-103.

Saunders, J., Aasland, O., Amundsen, A., and Grant M. (1993a) Alcohol consumption and related problems among primary health care patients: WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption I. *Addiction*, 88: 349-362.

Saunders, J., Aasland, O., Babor, T., de la Fuente, J., and Grant, M. (1993b) Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. II. *Addiction*, 88: 791-804.

Shahandeh, B. (1985) Drug and Alcohol abuse in the workplace: consequences and countermeasures. *International Labour Review,* 124(4), 207-223.
Sell, L., Segar, G., and Merrill, J. (2001) One hundred and twenty-five patients prescribed injectable opiates in the North-West of England. *Drug and Alcohol Review,* 20, 57-66.

Shewan, D., Hammersley, R., Oliver, J., and Macpherson, S. (1996) *Death by Drug Overdose among Female Drug Injectors from Strathclyde Recently Released from Prison.* Edinburgh: Chief Scientists Office.

Shils, E., and Finch, H. (1949*) Max Weber on the Methodology of the Social Sciences. Translated and Edited by Edward Shils and Henry Finch.* London: Free Press.

Schön, D. (1983) *The Reflective Practitioner.* London: Basic Books.

Shuster, E. (1997) Fifty years later: The significance of the Nuremberg code. *The New England Journal of Medicine,* 337, 1436-1440.

Sobell, L., and Sobell, M. (1981). Frequent follow-up with alcohol abusers as data gathering and after care. *International Journal of Addictions,* 16, 1077-1086.

Sontag, S. (1977) *Illness as Metaphor*. New York: Allen Lane.

Spear, B. (2002) *Heroin Addiction Care and Control: The British System.* London: Drugscope.

Spear, B. (1994) The early years of the 'British System' in practice. In: Strang, J. and Gossop, M. (eds.) *Heroin Addiction and Drug Policy.* The British System. Oxford: Oxford University Press.

Spear, H. (1969) The growth of heroin addiction in the United Kingdom. *British Journal of Addiction,* 64: 245.

Stimson, G., Oppenheimer, E., and Thorley, A. (1978) Seven-year follow-up of heroin addicts: drug use and outcome. *British Medical Journal,* 1: 1190.

Stimson, G., and Oppenheimer, E. (2002) *Heroin Addiction. Treatment and Control in Britain.* London: Tavistock Publications.

Stimson, G., Oppenheimer, E., and Thorley, A. (1978) Seven-year follow-up of heroin addicts: drug use and outcome. *British Medical Journal,* 1: 1190.

Stimson, G., and Ogborne, A. (1970) A survey of addicts prescribed heroin at London clinics. *Lancet,* i: 1163.

Stockwell, T., Hodgson, R., Taylor, C., Phillips, G., Gossop, M., and Brady, R. (1979) The development of a questionnaire to measure severity of alcohol dependence. *British Journal of Addiction,* 74, 79-87.

Strang, J., and Gossop, M. (1994) The 'British System': visionary anticipation or masterly activity? In: Strang, J., and Gossop, M. (eds.) *Heroin Addiction and Drug Policy.* Oxford: Oxford University Press.

Stockwell, T., Hodgson, R., Taylor, C., Phillips, G., Gossop, M., and Brady, R. (1979) The development of a questionnaire to measure severity of alcohol dependence. *British Journal of Addiction,* 74, 79-87.

Taylor, A., Frischer, M., and Goldberg, D. (1996) Non-fatal overdosing is related to polydrug use in Glasgow. *British Medical Journal,* 313, 1400-1401.

Taylor, C., Tobutt, C, Laranjeira R., and Oppenheimer, E. (1993) *Long Term Follow-up of Heroin Injectors at Drug Dependency Clinics in 1969. Report to the Home Office Research and Planning Unit.* London: Addiction Research Unit.

The National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research (1978) *The Belmont Report. Ethical Principles and Guidelines for the Protection of Human Subjects of Research.* Washington D.C. DHEW Publication No. (OS) 78-0012.

Thieren, M., and Mauron, A. (2007) Nuremberg code turns 60. *Bulletin of the World Health Organization,* 85(8), 573.

Thorley, A., Stimson, G., and Oppenheimer, E. (1976) Follow-up of heroin addicts. *Lancet,* 30, 974-975.

Thorley, A., Oppenheimer, E., and Stimson, G. (1977) Clinic attendance and opiate prescription status of heroin addicts over a six-year period. *British Journal of Psychiatry,* June, 130:565–569.

Tobutt, C., Gamblin, D., and Patton, R. (2017a) Alcohol identification and brief advice in England's Criminal Justice System. Where is the best novel setting to undertake a rigorous motivational brief interviewing brief intervention? *International Conference on Motivational Interviewing (ICMI),* Philadelphia, June 10th to 21st, 2017.

Tobutt, C., Gamblin, D., and Patton, R. (2017b) Alcohol identification and brief advice in England's Criminal Justice System. How does the concept of autonomy fit in with motivational brief interviewing brief intervention? *Estonian Motivational Interviewing Trainers Association: Conference 2017,* Tallinn, September 30th, 2017.

Tobutt, C. (2015) Alcohol brief interventions for hazardous drinking and dependency. *British Journal of Mental Health Nursing,* 4(2), 20-32.

Tobutt, C. (2011a) Introduction to Alcohol and the Workplace. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower Publishing Ltd.

Tobutt, C. (2011b) The nature of the problem: examining the evidence. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower Publishing Ltd.

Tobutt, C. (2011c) Alcohol screening and assessment. In: Tobutt C. (ed.) *Alcohol and the Workplace.* London: Gower Publishing Ltd.

Tobutt, C. (2011d). Alcohol interventions and treatment. In: Tobutt, C. (ed.) *Alcohol and the Workplace.* London: Gower Publishing Ltd.

Tobutt, C. (ed.) (2011e) *Alcohol and the Workplace.* London: Gower Publishing Ltd.

Tobutt, C. (2011f) Motivational interviewing for drug abuse: research and promise. Biobehavioral Processes and Health: Understanding Mechanisms, Implementing Interventions. Symposium 1130, *American Psychosomatic Society,* 69th abstract 1134, Annual Scientific Meeting, March 9th to 12th, San Antonio, Texas, USA.

Tobutt, C., and Milani, R. (2011) Comparing two counselling styles for hazardous drinkers charged with alcohol-related offences in a police custody suite: piloting motivational interviewing brief intervention or a standard brief intervention to reduce alcohol consumption. *Advances in Dual Diagnosis,* 3(4), 20-33.

Tobutt, C., and Tripper, J. (2010) Motivational Interviewing Network of Trainers (MINT): MINT forum and train new trainers (TNT), San Diego, California, USA, October 2010. *Journal of Advances in Dual Diagnosis Journal,* 3(3), 40-42.

Tobutt, C., Townshend, J., and Mitchell, K. (2010a) *Report to the Alcohol Education Research Council on a Pilot Randomised Controlled Trial: Outcomes for hazardous drinkers following brief intervention in a community criminal justice setting who were referred from Police custody suites charged with alcohol-related offences.* London: Thames Valley University.

Tobutt, C., Townshend, J., Milani, R., and Strang, J. (2010b) Pilot research study comparing motivational interviewing brief intervention or standard brief intervention: drinking outcomes of hazardous drinkers charged with alcohol-related offences. *Motivational Interviewing Network of Trainers Forum,* October 6th, San Diego, USA, Poster Presentations

Tobutt, C., Eriksson, J., Sanders, A., Bijl, R., and Gärdegård, N. (2002a) Managing for Quality and Safety. Drug and Alcohol Issues. Brussels: European Commission.

Tobutt, C., Bijl, R., Eriksson, J., Gardegard, N., and Sanders, A. (2002b) *For Kvaliet Och Sakerhet.* Sundsvall, Sweden: Mittogskolan and Forlaget and the European Commission.

Tobutt, C., Bijl, R., Eriksson, J., Gardegard, N., and Sanders, A. (2001) *Managing Alcohol and Drug Issues in the Workplace*. London: Thames Valley University and the European Commission.

Tobutt, C. (1999) Drugs and the Workplace: A Systems Approach. *United Nations Drug Control Programme and the International Labour Organisation 4th International Private Sector Conference on Drugs in the Workplace and the Community.* Working Group Four, Sundsvall, Sweden.

Tobutt, C., and Williams, D. (1999) Business and community collaboration. International Labour Organization and United Nations International Drugs and Crime Programme (1999) *Fourth International Private Sector Conference on Drugs in the Workplace and Community.* Sundsvall, Sweden, May 9th to 12th, 1999. International Labour Organization and United Nations International Drugs, Crime and Programme, and the International Labour Organization.

Tobutt, C., Laranjeira, R., Taylor, C., and Oppenheimer, E. (1997) A 22-year follow-up of British heroin injectors. *ANSA Journal,* Summer 1997, 20-27.

Tobutt, C. (1996) Long-term follow-up in opiate drug use. *Nursing Times,* October 23-29, 13.

Tobutt, C., Oppenheimer E., and Laranjeira, R. (1996) Health of a cohort of heroin addicts at London clinics: a 22-year follow-up study. *British Medical Journal,* 312: 1435.

Tobutt, C. (1994) *Pregnancy and Drug Use: Mothers or Moral Pariahs?* MSc Unpublished thesis Submitted for The Degree of Master of Science, London South Bank University.

Trebach, A. (1994) The infamous Bing Spear. In: Spear, B. *Heroin Addiction Care and Control: The British System.* London: Drugscope.

Trenoweth, S., and Tobutt, C. (2008) Assessing alcohol use and misuse in primary care. In: Martin C. (Ed.). *Identification and Treatment of Alcohol Dependence.* Consort, Cumbria: M&K Update Ltd.

United Nations Office on Drugs and Crime (2013) *The International Drug Control Conventions.* Vienna: United Nations.

United Nations Office on Drugs and Crime (2009) *Workplace Prevention: Promoting Health and Preventing Substance Abuse.* Vienna: Prevention, Treatment and Rehabilitation Unit, United Nations Office on Drugs and Crime.

United Nations International Drug Control Programme and the International Labour Organization (1999) Working Together in Europe 1999. *Fourth International Private Sector Conference on Drugs and the Workplace and the Community (Europe)*, Sundsvall, Sweden, 9th to 12th May, 1999.

United Nations International Drugs and Crime Programme (1998) A Drug Free World. We Can Do It. *General Assembly Twentieth Special Session, World Drug Problem.* June 8thto 10th 1998. Available from: *http://www.un.org/ga/20special/* [Accessed 28 May 2017].

United Nations International Drug Control Programme and the International Labour Organization (1997) Working Together in Europe 1997. *Fourth International Private Sector Conference on Drugs and the Workplace and the Community (Europe)*, Sundsvall, Sweden, 9th to 12th May, 1999.

Uzima (2012) Alcohol at work [electronic resource]: managing alcohol problems and issues in the workplace/Clive Tobutt, [Chief contributor and editor]. Available from: *https://uzima.library.strathmore.edu/cgi-bin/koha/opac-detail.pl?biblionumber=274745* [Accessed: May 30th, 2017].

Vaillant, G., and Milofsky, E. (1982) Natural history of male alcoholism. *Archives of General Psychiatry,* 39, 127-133.

Vaillant, G. (1973) A 20-year follow-up of New York narcotic addicts. *Archives of General Psychiatry,* 29, 237-241.

Vaillant, G. (1970) The natural history of narcotic drug addiction. *Seminars in Psychiatry,* 2: 486.

Williams, D. (1997) *Drugs and the Workplace.* Manchester and Manningtree: ColorPlus Design.

Williams and Tobutt (1997) Implementing prevention programmes in workplaces using the International Organization's code of conduct. *Third International Private Sector Conference on Drugs in the Workplace and the Community,* Petaling Jaya, Malaysia, October 3rd to 6th 1997. International Labour Organization and United Nations International Drugs and Crime Programme.

Willie, R. (1981) Natural processes of recovery. In Edwards, G., and Arif, G. (eds.) *Drug Dependence in the Social-Cultural Context.* Geneva: World Health Organization.

Willie, R. (1978) Preliminary communication: Cessation of opiate dependence processes involved in achieving abstinence. *British Journal of Addiction,* 73, 381.

Wilson, S, (2012) Tips for dealing with substance abuse problems in the workplace. *Los Angeles Times,* February 12th, 2012. Available from: *http://articles.latimes.com/2012/feb/12/business/la-fi-five-drinking-20120212* [Accessed: May 30th, 2017].

Winick, C. (1962) Maturing out of narcotic addiction. *Bulletin of Narcotics,* 14, 1-17.

World Health Organization (2017) *International Statistical Classification of Diseases.* Available from: *http://www.who.int/classifications/icd/en/* (Accessed 1st March 2017).

World Health Organization (2014) World Health Organisation. Global status report on alcohol and health 2014. Available from: *http://www.apps.who.int/iris/bitstream/10665/112736/1/9789240692763˙eng.pdf* [Accessed 28th May, 2017].

World Health Organization (2012) *Healthy Workplaces: a WHO Global Model for Action.* Available from: *http://www.who.int/occupational_health/healthy_workplaces/en/* [Accessed 28th May, 2017].

World Health Organization (1994) *Lexicon of Alcohol and Drug Terms.* Geneva: WHO.

World Health Organization (1992) *International Statistical Classification of Diseases and Related Health Problems. 10th Revision.* Volume 1. Geneva: WHO.

Zimmermann, J. (2015) *Hermeneutics. A Very Short Introduction.* Oxford: Oxford University Press Ltd.

Zweben, A., Rose, S., Stout, R., and Zywiak, W. (2003) Case monitoring and motivational style brief interventions. In: Hester R and Miller W. (eds.) *Handbook of Alcoholism Treatment Approaches.* Third Edition. London: Allyn and Bacon.

Appendix One

Trainee Operating Department Assistant (TODA)

The training was administered by the North-East Thames Regional Health Authority, and as part of that education programme, a placement on an inpatient ward setting was required. I enjoyed this surgical placement, and my mentor had fed back to me that I was good at interacting with patients and tasks. I reflected on this feedback as I dealt with people who were being anesthetised in preparation for their surgery either as a routine case or as an emergency. There was no real interaction or communication other than to check their name, number and site of a surgical procedure with their notes before the anaesthetist put them to 'sleep' with the associated silence. This bothered me as I am a social person and like the interaction with people. I talked to a theatre recovery sister about the possibilities of a career in adult nursing, and she suggested that I apply to the London Hospital, based in Whitechapel and Mile End (it later became the Royal London Hospital). I passed my ODA exams with a double distinction and was accepted as a student nurse at The London. The next section adds further observations regarding my move in nursing as a career.

The Maudsley Hospital Emergency Clinic

I sought help from the alcohol clinic at the Maudsley hospital where a psychiatrist helped me develop an alcohol withdrawal protocol for the emergency clinic. This was when I first became aware of the alcohol dependence syndrome. This is a clinical syndrome for diagnosing an individual with alcohol dependence. This syndrome was accepted into the World Health Organization's (WHO) clinical classification system in the early 1980s (Edwards, *et al.,* 1981). It can be measured by the Severity of Alcohol Dependence tool (Stockwell, *et al.,* 1979). I then completed a one-year full-time postgraduate programme in *Addiction Studies* at London University (Edwards 1991).

I also taught a health inequalities module on a new sociology programme. In addition, I took advantage of the European Erasmus programme to undertake a teacher exchange to Estonia. They had read the chapter that I wrote with Steve Trenoweth on alcohol brief interventions (2008) as well as my government links when at the National Substance Agency for Substance Misuse on preventing drug-related death. I linked with a Professor of Public Health (Criminal Justice System) at Southampton University. The current plan is to develop a grant application for a feasibility study for the National Institute of Health Research (NIHR). This would be designing a randomised controlled trial (RCT) for a motivational Interviewing Brief Intervention (MIBI) for hazardous alcohol drinkers in a novel criminal justice setting such as in a police

custody suite. I developed a steering group and published a review paper on alcohol brief interventions (Tobutt, 2015). However, a journal article on a protocol for the same area was published by a research group in the North East of England. The focus of the novel setting has moved to young offenders in the community (Tobutt, *et al.,* 2017).