Norway's Pioneering Approach to Drug Addictions. Lessons for the UK?

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2017 Fellow

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NHS

Contents

Acknowledgements

Thank you to the Winston Churchill Memorial Trust for this incredible and inspiring opportunity. Thank-you to both the UK and Norwegian Health services who have supported me during my project. Thank you also to my family for their support.

Abbreviations and glossary

Akuttmottak - Emergency admissions.

Akuttposten - The Acute Post (Emergency room for overdoses).

Avdeling for Rusmedisin - Department of Addiction Medicine.

Avgiftning - Detox.

Distriktspsychiatrisk Sentre (DPS) – District Psychiatry Services.

Døgnbehandling - Short term admissions (24 hours).

Dugnad - Traditional communal spring cleaning.

GP – General Practitioner or General Practice.

Helsehjelp til Papirløse - Healthcare to the Paperless (Asylum seekers).

KAD (Kommunal akutt døgnenhet) – Intermediate care services.

Kommune – Local Council.

Legemiddel Assistert Rehabilitering (LAR) program - Opioid substitution program.

Lege i Spesialisering – Spesialist trainee doctor.

Legevakt – The Emergency Department/Acute Primary Care Service.

Poliklinikk - Outpatient treatment.

Politiets Utlendingsenhet (PU) - National Police Immigration Service Norway.

Rehabilitering - Medium to long term admissions.

Rusmedisin – Addiction medicine.

Rus og Psykiatri (ROP) – Addiction and Psychiatry patient cohort and service.

Spice – Synthetic Cannabis.

Tolk – Translation.

Tverrfaglig – Multidisciplinary.

Turnustjeneste – Norwegian Foundation Programme for Doctors.

UDI – Utlendingsforvaltningen - The Norwegian Immigration Administration.

Vinmonopolet - Government run alcohol shop.

About me and professional experience

My name is Joseph Malone and I am a 29-year-old junior doctor currently working as a General Practitioner. I am originally from the North West of England and have studied Medicine at the University of Liverpool along with a master's degree in international health at UCL and the University of Bergen. With the kind support of the Winston Churchill Memorial Trust Scholarship, this year I set out to explore how Norway deals with drug addiction, spending 10 weeks in the city of Oslo, the capital of Norway from March until June 2017.

An Englishman in Norway

Executive summary

Norway is fortunate to have developed a strong economy over the past few decades following the discovery of oil in the North Sea in the late 1960s. This coupled with a history of strong socialist politics, common across Northern Europe, has led to a society blessed with extremely high standards of living. Paradoxically, the country appears to have developed a 'spoilt child syndrome' in response to its great prosperity. Addictions, in particular, hard drugs such as heroin have flourished, becoming a huge health issue in recent years. I explored how alcohol and drugs are dealt with in Oslo and the treatment of migrants within the addiction health system, following the huge problems in European with the on-going migrant crisis. I met with doctors, nurses, psychologists, researchers, medical students, team leaders, counsellors and managers during my exploration of the Norwegian substance misuse service. I found a country successful in its management of substance misuse and keen to pioneer in this area. Despite Norway's and the UK having vastly different financial and systemic structure to their health services the holistic integrated multidisciplinary system at work in Oslo shows how much the UK could improve care delivery to substance misusers but used a more team-based approach.

Aim of the project

I explored the variety of innovative methods the Norwegian Health System has implemented to help its extensive drug using population. I am to back my findings to the UK to help suggest ways in which addiction services in Liverpool could be optimized, along with the rest of the country. The main overarching questions I set out to answer were:

- Would a standalone medical speciality in Addictions improve treatment of substance misusers?
- Does the use of specialist Akuttpost (Emergency Unit for Detoxification) prove more effective than treating via conventional general Emergency Medicine departments in the UK?
- How does a larger provision of psychological services impact on Norwegian addiction services?

Oslo Legevakt (Emergency department)

Methods

I spent 10 weeks in the capital of Norway, Oslo. Being the capital and largest city, it also has the largest drug using population and is the most ethnically diverse city (which poses interesting challenges for substance misuse treatment) and is also where the most interesting innovations in healthcare and research are being tried out in Norway. I also had the greatest variety of contacts here.

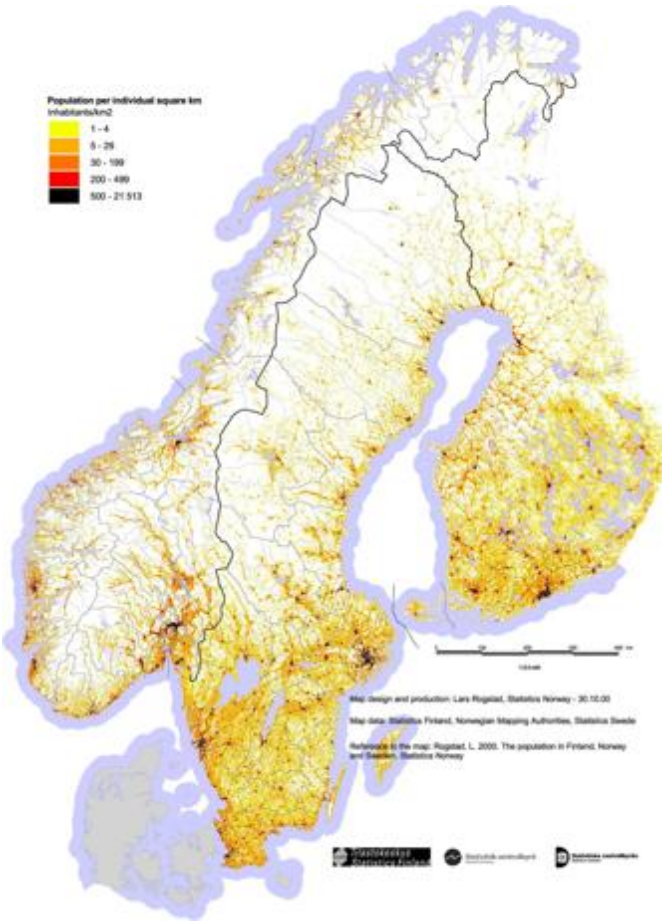
I visited all areas of the addiction service in the Oslo: Emergency Care, Primary Care, Secondary Care and Research. I also visited the allied non-profit organisations that work with the public drug services to gain a rounded perspective on the treatment provision in Norway.

By immersing myself in all areas of the health service I could gain a good perspective on what is offered and how this compares to the UK equivalent.

Norway is fortunate to have the financial ability to invest in new approaches within its healthcare system. It has also been forced to innovate due to the extreme nature of its substance misuse problem. I believe this is a good reason to look at how the country has dealt with its addiction problems and what can be learnt.

An on-call doctors car at the Legevakt.

Report overview

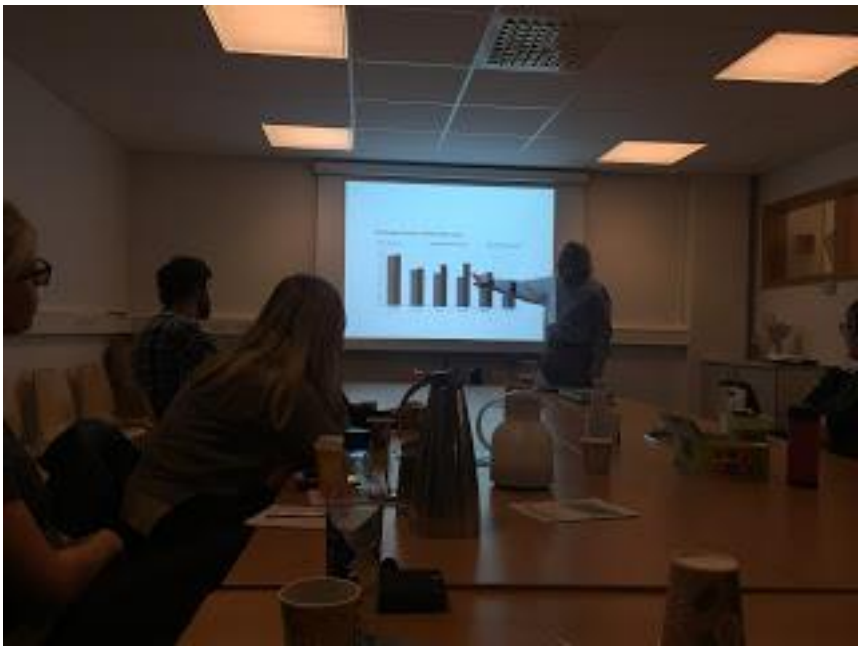


Substance misuse is defined by the World Health Organization as "…the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs.". However, the acceptability of specific illicit substances varies from country to country. The legal availability of cannabis in Holland is an obvious example, but more obscure addictive substances such as Khat may be acceptable to use in African or Asian countries but deemed illegal in European countries.

Life expectancy in the UK (81.5) and Norway (81.45) is roughly the same, however population density in Norway is (14 people per sq. km) UK (269 people per sq. km). This is interesting given that the population in the UK (63 million) is 12 times greater than Norway (5 million) however the land area in Norway (385,178 km²) is 50% large than the UK (242,495 km²). Therefore, Norway has had to provide high quality healthcare over a huge area to a smaller population which historically has had population virtually all the way along

the entire coastline all the way to the Russian border and above the Arctic Circle and including the many small islands off the western and Northern coastline. In contrast to other countries in Scandinavia there is much more a spread of population throughout the country although most the population does still live in the more southern regions.

Some of the obvious differences within the substance misuse patterns in Norway are lower levels of alcohol excess, likely in part due to a stricter approach to pricing and availability. Alcohol is taxed by strength at higher rates than in the UK and only lower strength alcohol can be bought in supermarkets which all wine and spirits only available in the Vinmonopolet (state run alcohol shops), which is a state-run monopoly that is closed most of the day on Saturday, all day Sunday and not open past early evening during the week. Methamphetamine use is more prevalent here compared to my experiences in North West England however Spice (Synthetic Cannabis) which is becoming an increasing difficult problem to manage in Manchester is currently almost unheard of in Oslo.



Specialist trainees in addiction receiving their weekly teaching in Oslo from Rune Tor Strøm.

The training and work culture is much more relaxed and informal in Norway with no real feeling hierarchy, senior staff all work on first name terms and are always readily

available for advice. I attended the weekly teaching with Lege i spesialisering (specialist trainee doctors) and there is a great emphasis on learning from best practice and actively looking at research from innovators across the world. There is a feeling within the service that due to higher staffing levels, the medical staff have time to spend looking at how to implement changes and improve services rather than just drowning in service provision.

Culturally there is also a greater emphasis on working together. At the end of my first week the entire department and patients took part in the traditional communal spring cleaning work ´Dugnad´ which is taken very seriously by the entire population. Everyone got together and cleaned the large garden area around the inpatient unit and had a BBQ afterwards. In comparison to work in the UK there is much more opportunity for everyone to sit down together at lunch, team meetings and teaching sessions regularly during the week. The result is a much friendlier environment both for staff and patients.

The Addictions centre at Ullevål Hospital

Research questions

1. Would a standalone medical speciality in addictions improve treatment of substance misusers in the United Kingdom?

2. What is the relationship between Kommune (Council) health services and hospital trusts for substance misuse in Norway?

3. How does aftercare (post-detox) treatment differ in Norway?

4. Does the use of specialist Akuttpost (Emergency Unit for Detoxification) prove more effective than treating via conventional Emergency Medicine departments in the UK?

5. How does a larger provision of psychological services impact on Norwegian addiction services?

6. How does the two-tiered emergency service structure of Legevakt and separate speciality emergency services at regional hospitals in Norway improve hospital care for addictions?

7. Has the integration of primary and secondary healthcare services through the Legevakt (emergency department) helped in the treatment of substance misuse in Norway?

8. How has the drug scene in Oslo evolved over the last few decades, with regard to the large levels of immigration?

Major Findings

- Whilst still in its infancy, stand-alone specialisation in addiction medicine allows a more focused comprehensive healthcare approach to substance misuse treatment. Norway's first ´from scratch´ specialists in training are yet to complete the 5-year training so consultants have been drafted in from other specialities to oversee the first cohorts´ training.
- Norway has worked hard to better integrate local authorities social care services with healthcare services through a variety of techniques including fiscal policies. The result from a UK perspective is an impressive almost seamless transition between hospital to community care. A key part of this is a result of imposing fines on social care teams who fail to have care packages ready within 24 hours of being requested for an impending hospital discharge.
- The greater emphasis on aftercare services and their integration into the public health care system appears to help reduce relapse rates in the Norwegian healthcare system, with the potential of saving money in the long term.
- Separating acute overdose/detox services in large cities away from other acute services helps provide a more organised and focused approach to substance misusers who are often seen as a frustrating burden in UK emergency departments.
- Norway and Scandinavia as a whole have long promoted psychological work within the health service and this appears to be highly beneficial for drug treatment services many of whom have co existing mental health disorders.
- The Norwegian drug service is highly multidisciplinary with social worker, doctors, nurses and psychologists sharing patient ownership, often the psychologist will overtake the leadership role from the doctor in Norway. This is seen as controversial by some Norwegian doctors and I occasionally got the impression from some that feel this was perhaps a step too far.
- The Legevakt system (emergency department) drastically cuts the number of needless hospital admissions and utilizes the huge resource of general practitioners in providing out of hours' care. The UK could do much more with general practice out of-hours care with better resourcing. On-call duty by general practitioners is compulsory in Norway though many older GPs try to give away there shifts to younger keen trainees. This coupled with the frequent use of KAD patient beds (intermediate care beds) relieves pressure from secondary

healthcare and empowers primary healthcare to take on more management of acute conditions.

- Norway, despite being a highly-centralised healthcare system has strived to provide as much addiction treatment as possible in the community setting. Having said that there appears to be much more specialist inpatient treatment available to those in need of more intensive treatment.
- Through the proactive work of local authorities, longstanding large drug scenes in the large urban areas such as Oslo and Bergen have been shut down, scattering drug dealing and drug use across the cities and making it more difficult to use and solicit narcotics. This appears to be encouraging people to seek treatment with substance problems.
- The use of exercise in the treatment of addictions and mental health appears to be an immerging trend within both research and practical therapy within the Oslo healthcare system and could be explored further within both of these levels in future within the UK healthcare service.

Recommendations

- Streamlined medical specialisation in addiction medicine would complement the UKs well established research and guideline driven drug services.
- The ratio of doctors to patients in the UK is lagging behind most western European countries and needs to be addressed in order to improve quality of care.
- Close work is needed between local authorities, primary health care and secondary/tertiary healthcare. The open ´spice´ drug scene in Manchester Piccadilly Gardens is a glaring example of the UKs failure to effectively crack down on the availability and use of drugs whilst encouraging users into treatment.
- Considering the huge numbers choosing to study psychology at university in the UK the numbers able to continue into a care in the health sector is shockingly limited. UK services should look to expand the use of psychology in the healthcare within addictions.
- The use of Legevakt (emergency) style acute primary care service and acute overdose/intoxication units would help reduce the burden on dangerously overloaded accident and emergency services.
- Aftercare is poorly provided by public healthcare services in the UK and often provided mostly my third sector charity groups. Relapse rates could be drastically reduced by introducing more aftercare into UK addiction services.
- Explore the use of exercise within both addictions and mental health is being seen as a key aspect of future care models in Norway. Oslo has been partnering with Australian and Swedish researchers to use exercise within both these fields and the results appear to be yielding good effects.

Introduction to the project

Norway in recent years has become known as a world pioneer in its approach to substance misuse and the services I explored in Oslo are truly world leading. It is fortunate to be one of the most prosperous countries in the world thanks to a strong economy buoyed by its oil industry which began in 1969 following its discovery in the North Sea. Norway is lucky to have the financial ability to invest in new approaches within its healthcare system**.** However, in 2014, Norway had the second highest rate of drug overdose deaths in Europe after Estonia. In the process of tackling its complex drug problem it become the first country to introduce a standalone addiction specialty for doctors: Rusmedisin (Addiction Medicine). It has also pioneered the Akuttpost (Emergency Detoxification Units) and extensive psychological services, a common feature of Scandinavian healthcare.

Addiction specialist training in the UK currently falls within the spectrum of psychiatry services in the UK and the addiction service has much less financial investment compared to Norway. The United Kingdom has approximately half as many doctors per 1000 patients in comparison to Norway. Whilst Norway is perhaps a special case in Europe economically speaking, it is alarming that the United Kingdom lags so far behind other large western European countries in terms of doctor to patient ratios.

I believe a standalone medical speciality in drug addiction treatment as seen in Norway would greatly improve the quality and effectiveness of care in the UK. Currently in the UK doctors must train approximately 5 to 7 years in psychiatry before being able to gain specific drug addiction experience. Focused streamlined training for those interested in this area of medicine would create a more tailored service to cater for this complicated patient population.

The relationship between local authority service provision and specialist health services could also benefit from altering its approach. The healthcare structure in Norway is a centralised model but this results in clearer national guidelines. There is also much better

dialogue between the various actors both in community services and specialist hospital services in Norway which provides a more effective multi-disciplinary environment.

Whilst a lot of the measures implemented in Norway require more upfront investment into health services, they also show that aftercare (post-detox) treatment cannot solely be provided by charity services. Many patients in the Norwegian system are offered staggered re-admission offers after completing successful detox. This is designed to reduce the number of relapse cases by allowing patients who are self-aware enough to notice when they are feeling vulnerable to restarting drug use to seek short readmission for stabilisation. The Norwegian philosophy recounted to me by various specialists in Oslo is that early investment into a patient's problems often is more cost effective in the long-term.

Big cities such as Oslo and Bergen have also begun separating acute drug overdose cases and treating them in specialist Akuttpost services (24-hour acute detox centres). They also allow rapid access to further stabilisation treatment for those wanting to cooperate. This helps take the strain off frontline A+E equivalent services which are often swamped by intoxication/overdose cases in large cities. As a lot of overdose treatment is often conservative management and based on monitoring and symptom scoring it makes sense to divide this cases from other acute medical management.

Another interesting difference between UK and Norway is the heavy presence of psychology within mental health and addiction services. The inpatients units in Oslo all included psychologists in every team, along with social workers. Often, I encountered that psychologists outnumbered doctors and took overall management responsibility for patients, something which is rarely seen in UK health services. I observed this occasionally seem to raise slight tension between some doctors in the Norwegian health service. Overall, I feel this ´tverrfaglig´ (multi-disciplinary) approach was of clear benefit to the patients.

Perhaps one of the most significant differences between UK and Norwegian healthcare reflects how much structural change has occurred in the UK. The Legevakt system in Norway which is a 24-hour acute health service manned mainly by general

practitioners and perhaps reflects on how GPs used to take on more acute care in the UK. In addition, Norway has retained the cottage hospital system which was done away with in the United Kingdom many decades ago. This is most likely because of the countries small population yet vast geography meaning it is necessary to continue to have 40-50 bed hospitals scattered across the country. The health system in Norway seems to have some much more practical hands on general practice culture. Likewise, patients cannot go directly to the secondary care hospital services without having been seen by a general practitioner or deemed sufficiently acutely unwell enough by an ambulance team. This benefits the drug service as long team addiction follow up is managed much more through the community healthcare services rather than specialists. The stronger gatekeeping of GPs in Norway also prevents more needless AED admissions which so often drown Accident and Emergency services in the UK.

Drug scenes in big cities such as Oslo and Bergen have great change over the past few years. Previously authorities had taken a more passive observational approach to key drug scenes in areas such as Kongeparken (The Kings Park) in Oslo and Nygardsparken (The New Farm Park) in Bergen. However, as the addiction services have evolved to be more proactive so to have authorities in Norway sort to crack down on substance misusers. Drug scenes have been shut down where previously ambulance services would patiently wait nearby to collect a steady stream of daily overdoses. The aim has been to disrupt the comfortable drug market and scatter both dealers and users to make life as a substance misuse or dealer more difficult. The hope is that this will encourage more users to seek treatment but there is a risk this may only push the drug scene more underground.

Finally, and perhaps most surprisingly I discovered that in Norway exercise is becoming more and more important as a part of the treatment of both mental health and substance misuse. There is a great focus in Scandinavia on the love of the outdoors within the general population and this has perhaps filtered down naturally into the service along with the help of some focused research. Within some of the longer-term stabilisation services that I experienced I saw great many patients benefit greatly over the organized outdoor activity. Perhaps more often than the other psychological interventions, social work

or medical work I was left with the feeling that simply encouraging the use of regular exercise be that in an individual or group environment appeared to yield great results within the substance users working their way into cleaner calmer lifestyle.

Back in 2012 the then Norwegian minister of Health put forward “Drug and Alcohol Policy”, a white paper which amongst other things set about establishing full medical speciality in Addiction Medicine. It is in fact around 15 years since Norway last launched a new medical speciality within its healthcare system. Norway is the first country in the world to have created a stand-alone medical speciality in drug addictions. This political decision has set underway various changes within the addiction services in the Norwegian healthcare system.

Alongside doctors, other allied health professionals, municipal representatives and user groups services have begun collaborating in new ways to change the structure of drug abuse treatment. There had been a growing desire for this within the last decade within Norway’s health system in recognition of the fact that drug dependence often requires close medical management. Specialist trainees spend 5 years training which is a common training period for most medical specialities, including GP training in Norway. There are no exams, regular structured state funded training course, regular teaching, close supervision but with much earlier emphasis on trainees training early full management for patients with more arm’s length support from seniors.

This is noticeable from when junior doctors start their ´Turnustjeneste´ (Foundation programme internship rotations) which is a shorter 18-month period rather than 2 years in the UK. There are almost 50% more doctors per 1000 people in Norway (4,3 in Norway verses 2,8 in the UK) and this doctor to patient ratio is one of the highest in Europe beaten only by Estonia and Greece based on 2012 Eurostat statistics. Spending per patient is also almost exactly double what the UK spends on patients. Most this is likely to be accounted for by significantly higher wages and staffing levels which usually make up as large proportion health expenditure, contributing to roughly a third of the UKs health budget.

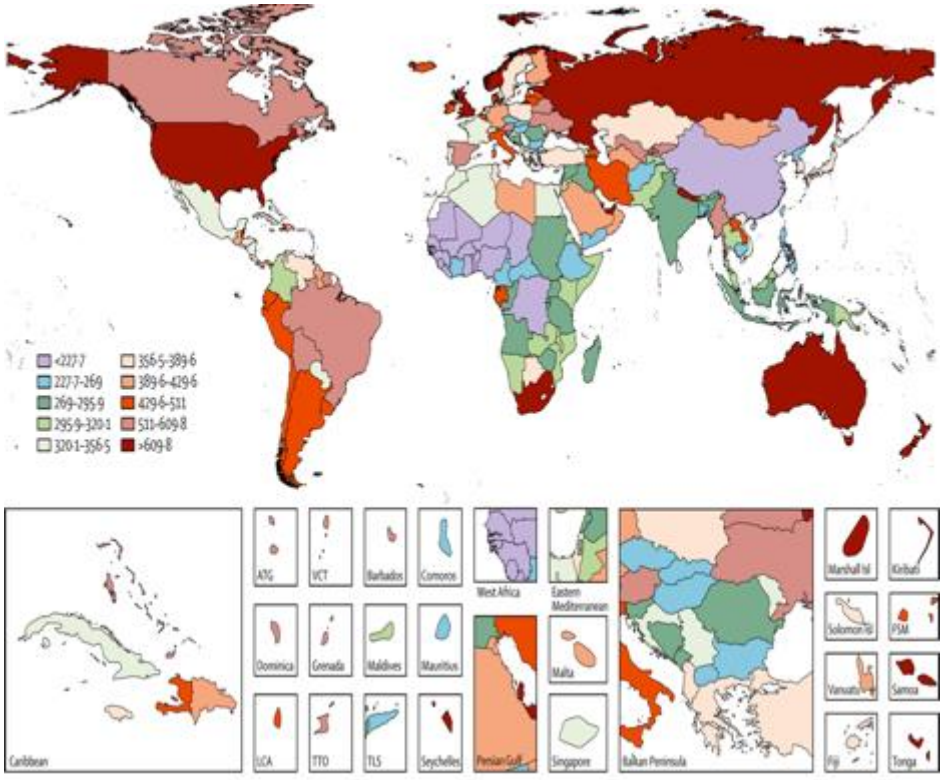
By December 2016 around 72 Norwegian specialists had gained accreditation in addiction medicine with a further 120 doctors undergoing specialist training to thereafter also gain consultancy positions. The national drug service will be centred around 10-12 larger hospitals and institutions and supplemented by a further 6-8 smaller units. The training scheme for doctors consists of 5 years of internship training. One year of this training is within psychiatry, 6 months within an allied field of the doctors choosing and the remaining 42 months within addiction medicine.

Aker Hospital Addictions Department

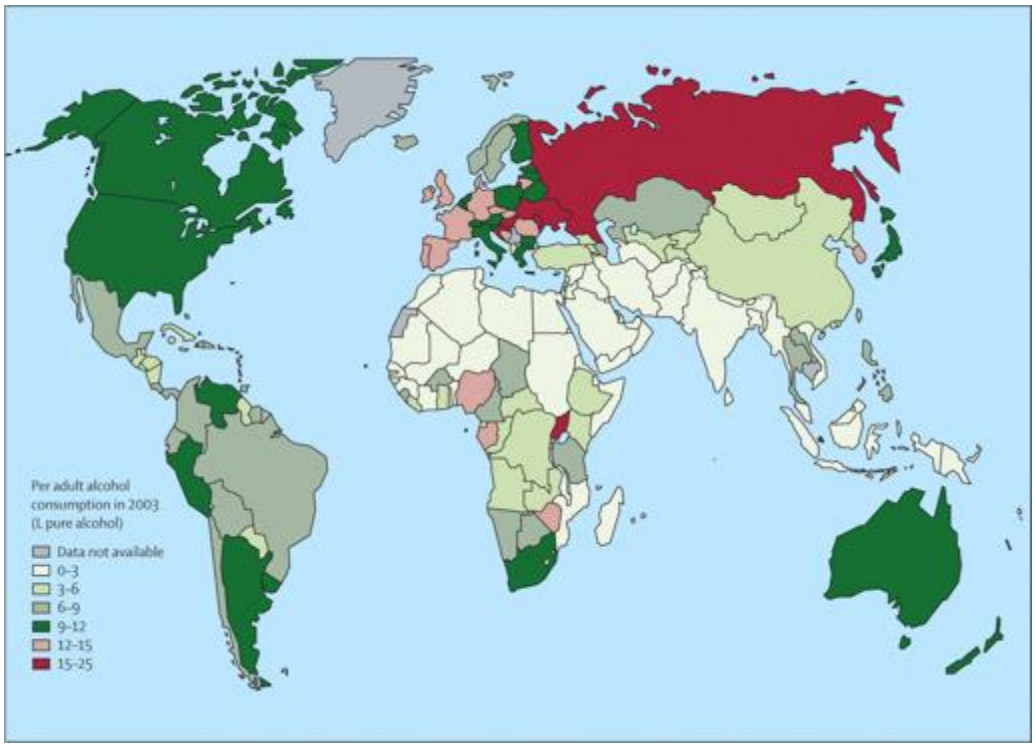
Findings

In 2014, Norway had 76 deaths from overdose per million of the population which was the second highest rate in Europe after Estonia. Within the Norwegian drug using population, over half of the heroin use is done via injectable methods. In 2011, Bergen, Norway's second biggest city had the largest number of drug overdoses in Europe.

In 2013 there was 987 people in Norway registered with the Legemiddel Assistert Rehabilitering LAR program (Opioid substitution program for opiate detoxification). It was estimated in 2008 that there are in total around 8,200 to 12,500 injecting drug users in Norway. There are obvious difficulties gaining accurate continuous figures for drug using populations due to their hard to reach nature.



[Figure 1 – The Lancet. *Age-standardised disability-adjusted life years (DALYs) attributed to illicit drug use in 2010. Age-standardised DALYs per 100 000 population. Norway is rated High=significantly higher than the global mean.***]**



[Figure 2 – The Lancet. *Exposure to alcohol - recorded and unrecorded adult consumption by country.***]**

Norway is noted to score poorly for age-standardised disability adjusted life years attributed to illicit drug use, being rated significantly higher than the global mean, see Figure 1. There is also less extreme but still significant recorded and unrecorded adult consumption of alcohol compared to global trends, see Figure 2. It is likely this difference between alcohol and drug problems is directly because of strict alcohol laws, which prohibit all but weak strength alcoholic drinks such as lager from being sold in supermarket. The rest of the alcohol is then sold via a government run shop (Vinmonopolet) and the times during the week that alcohol can be sold are limited. Historically this has been good for the countries health but also encouraged importing of large quantities of alcohol from neighbouring countries either over land, from ferries or at airport tax-free. It also led to periods of homebrew moonshine type production, like the response during American prohibition.

The health-care structure in Norway is a public service funded via health and social care insurance usually paid via employers unless you are deemed unable to pay, in which case you qualify for state support. Compared to the UK, Norway spends roughly twice as much per capita on its health system compared to the UK. However, it should be noted that Norwegian wages are also much higher, which is likely to explain where most that additional

expenditure goes. This raises an interesting point when commentators champion the NHS as a model health service in cost efficiency. Most cost associated with healthcare systems is often staffing. The more 'efficient' a health service appears to be, is also likely to be reflected in poorer pay conditions for its workforce.

In addition, Norway has almost twice as many doctors per 1000 people in the population compared to the UK. Private health care is much smaller than in the UK but is thought to be growing. Health and social care is also much closer in alignment, care homes for elderly and disabled individuals are often state run and manned by doctors, reduced the burden on rest of healthcare system. Similarly, this benefit those with substance misuse who receive more aftercare post detoxification. The UK hopes to move more of its healthcare treatment into the community out of hospitals. However, this will most likely be hampered owing to care homes and aligned services overall being privately run.

Norway has also subdivided emergency services in to separate departments. Overdose cases in larger cities are seen in stand-alone emergency detoxification units called Akuttpost (Acute Posts). Next door to this in the city centre is the Legevakt (on call doctor station) and a cottage hospital system like those which used to exist in the UK. The service is a clever integration of primary and secondary care and General Practitioner doctors must work a set number of on call shifts there as part of their job. This engages primary healthcare doctors in direct partnership with secondary care and makes use of the vast numbers of primary healthcare doctors. As most doctors in a developed healthcare system are general practitioners, the UK could do well to incorporate its own family doctors into the emergency service in this manner. More serious emergencies are then taken to main city hospitals, which then has an emergency room, manned with doctors from each subspecialty.

Addictions have become an area of focus for the Norwegian Health System in recent years. This is partly due to the size of the drug addiction problem in the country and due to the difficulty in categorizing of addictions within healthcare, as it falls awkwardly between medical and psychiatric disciplines. Norway has strived to address this and has become the

first country to introduce the standalone healthcare specialty for doctors in Rusmedisin (Addiction Medicine).

The addiction services in Oslo are split between the new Department of Addiction Medicine (Avdeling for Rusmedisin), Psychiatry services, some smaller private non-profit providers and the local council. Psychology is traditionally a profession held in high esteem in Scandinavia and within addiction services in it was surprising to find that psychologists outnumbered doctors. My own experience from UK healthcare was that due to lack of funding psychologists were now non-existent in the addiction service, as funding had only prioritised children and forensic mental services to receive this type of service. Norway is also actively involved in global research. They are currently involved in a multi-city drug trial in Norway with an American pharmaceutical company looking at a new method of delivery for Buprenorphine a drug used in the long-term treatment of opioid addiction. This is given via slow release depot injections once a month rather than daily doses that can be frustrating and difficult to manage for many with substance misuse problems that lead erratic lifestyles.

One overwhelming feature of the health system, which I noticed in the many visits, and meetings I made, was a willingness to change and adapt the system when things appeared to not work or be inefficient. The success of electronic patient journals for example in Norway, which have been in use since the 1980s, is something that UK hospitals can only dream about. Only so much of this change can be mediated by money, the rest requires a desire and motivation to improve things for the health of the population.

What did the organisations visited offer?

I spent most my time between Ullevål and Aker hospitals whilst in Oslo. These make up two of the hospitals in the Oslo University teaching hospital trust.

The department of intoxication and substance dependence ARA (Avdeling for Rus og Avhengighetsbehandling has responsibility for multidisciplinary (tverrfaglig) treatment for the whole of Oslo's population. The department is split up into a variety of services:

- Akuttmottak (Emergency admissions for detox/withdrawal)
- Poliklinikk (Outpatient treatment)
- Avgiftning (Detox)
- Døgnbehandling (Short term admissions)
- Rehabilitering (Medium to long term admissions)
- Age groups are split into general adults (over 26 years old) and young adults/adolescents.

Those with serious psychiatric conditions are treated by parallel services with psychiatry and they are known as ROP, Rus og psykiatri (dual diagnosis) patients. I divided my time mainly between the adult ward medium to long term admissions and the acute/short term admissions departments. The medium to long term admissions ward had a maximum capacity of around 31 including 2 forced detox admission beds. The department was divided into 3 sections with varying staff levels to reflect the stability of the patients assigned to each area. The staff involved with the patients covered a wide range of professions working in multidisciplinary teams. The teams included consultant doctors, doctors specialising in addictions, psychologists, social workers, nurses and healthcare assistants.

The treatment schedules are very comprehensive with focus on all aspects of the patient´s life from health, psychosocial, physical activity, culture, family, education, work situation, life situation and criminality. The days are broken up into an individualised schedule for each patient with group therapy, psychological assessments, physical activity, education, environmental therapy, goalsetting/milestone meetings and individual therapy spread out throughout the week. There is a great emphasis on psychology within the health

system and therefore there was great focus on cognitive behavioural therapy and motivational interview skills.

Overarching patient responsibility is provided jointly by psychologists and doctors which differs greatly from UK health systems which uses much less psychology within healthcare, most often found in children psychiatry services and forensic psychiatry services. There is much greater focus on limiting dropout within the Norwegian health services. Whilst the services themselves are more comprehensive. There is also the ability to allow planned readmissions staggered throughout the year to patients who manage successful detox but then feel vulnerable to relapse. There are therefore able to gain readmission during periods of vulnerability to prevent full relapse and support them. Most the medium to long term patients stay around 6 weeks but some have been known to stay up until around 6 months when necessary.

A presentation on drop out reduction at Aker Hospital

Interview findings from professionals involved in the field.

Rune Tor Strøm

Whilst spending time at Aker hospital I could attend the addiction trainees teaching sessions led weekly by Rune Tor Strøm, addictions specialist. The structure of training allows trainees to begin with inpatient work first and after completing a variety of obligatory courses and gaining enough experience thereafter move across into the outpatient clinic setting as is often the case a lot of medical specialist training programmes. His approach to teaching aiming to highlight that patients with substance misuse are often physiologically different from the general population due to long term use of substances. This is perhaps one of the core reasons to have medical specialists trained in dealing with patient cohort rather than treating addictions as an off branch of psychiatry.

Heini Ringel

I spoke to the leader of the medium to long-term rehabilitation centre at Ullevål hospital whilst shadowing the teams there. He spoke with great emphasis on their work to limit drop out within the addiction services seeing as so much time and effort is often invested in the patient cohort and successful outcomes can be very difficult to achieve.

Helge Waal

Helge Waal is Professor in Addictions and Psychiatry he has been one of the driving forces behind drug treatment research in Norway with the organization SERAF (Senter for rus og avehengighets forskning – National drug research center). He has been a big advocate for the move towards outpatient led treatment. One the innovations that have come through in recent years to aid the treatment addictions have included naloxone nasal sprays an opioid antagonist which is used in acute overdose situations. We discussed some of the future developments including current trials looking at improvements to depo injection treatment to aid in the long-term treatment of opioid misuse. It is likely that this will be a valuable treatment for a large proportion of patients in the future and will cut down on the need for patients to attend healthcare settings at regular intervals during the week to collect medication. European countries have also been looking to Portugal for ideas about policing as they have been trialling with great success the decriminalisation of all drug

use. It may be in the future that Norway could choose to adopt a similar stance. Within Norway today the greatest changes appear to be within alcohol treatment, cannabis and methamphetamine for a variety of reasons and this is indicting a general shift in drug habits as has been witnessed in the United Kingdom.

Jørgen Bramnes

Jørgen is a researcher and addictions specialist. He feels one of the key importance's with the new specialist addictions service is early pick up of dual diagnose ROP (Rus og Psychiatry Patients). The research teams in Oslo have been working very hard in Oslo to create an open and outward looking research environment which aims to be world leading in the field. The open Norwegian society has aided the development of treatment and will hopefully provide a sustainable platform for future developments.

Odd Martin

Odd Martin is a Legevakt doctor at Oslo Legevakt with research interests in addictions. Within Oslo he feels there is very good teamwork between Legevakt service, Hospitals and Specialist Addictions services. Seeing as the GP, Legevakt or ambulance services are usually the frontline gatekeeping service this has been vital to ensure the correct treatment as not all patients coming with acute addiction problems will be immediate candidates for further specialist treatment. The Ambulance service in Oslo has also recently been trailing a fast response overdose service modelled in a similar fashion to the American addictions system to help get appropriate rapid acting treatments such as Naloxone more readily available, recent availability of intranasal medications has helped this situation greatly. Large cities such as Bergen and Olso have been offering Rusakutten (akutt detox/stabilisation) services which are acute admission centres dealing primarily with overdose cases this has also helped take the strain out of other acute services, a problem known far too well to overflowing emergency medicine units in the UK.

Guri Spilhaug

Guri is a leader with the Health South West in Norway which is roughly equivalent to a Strategic Health Authority in England. With such a small national population which totals

less than that of London's and is of a similar size to Scotland, inevitably service governance is more centralized. She talked about the evolution of the medical addiction specialisation programme which has been a natural evolution within the Norwegian Healthcare Service born out of frustration within the service that psychiatry services were perhaps not the most suited base service for many substance misuse patients. There is a move within the Norwegian healthcare as seen in the UK to move to move local authority (Kommune) based services in the future. One of the big challenges she highlighted in implementing a new addictions service was ensuring good service coverage nationwide and not just in larger cities. The vast geography of Norway has meant that healthcare leaders have had to make very decisive decisions on service provision structure. Norway in comparison to Sweden has opted to try and cover much more of the rural areas with small hospital and well-equipped GP practices. Sweden on the other hand to centralise much more of the healthcare service in the south of the country and invest more heavily in transport services. In Norway this is partly because of the countries enormous coast line which historically due to fishing trade meant the population is in-fact scattered along the entire length of the country stretching all the way to the Russian border. It is common practice to offer blood tests, small surgery and ultrasound in house at a GP practice as otherwise patients will travel long distances for basic procedures and investigations. This has led to some to speculate that Norway perhaps has one of the best GP training systems in the world. Training is 5 years, the UK on the other hand being only 3. In addition to a large variety of tasks during the working day GPs are also required to be available on call a certain number of days a month at the local Legevakt (emergency department). GPs are therefore perhaps more empowered and capable of handling complex issues due to greater breadth of work during working days. Guri explained her excitement about the first cohort of new trainees in addiction medicine qualifying in the next couple of years and reflected on the fact that in her opinion the introspective nature of Norwegian society as in other parts of Scandinavia means that culturally people want to find solutions and help each other collectively.

Gabrielle Welle-Strand

Gabrielle is a leader within the Health directorate in Norway, similar perhaps to the Department of Health in the UK. She explained to me that a core aspect of the new

addictions services is that they are now much more patient, and the hope is that future patients will be deciding much more themselves what type of services they feel are most beneficial to them. This will be most visible in the creation of Patient Pathways a term that has been most seen with acute medical care within UK hospital for example in acute stroke treatment. The road to the current specialist training was not easy and in fact two failed attempts before reaching the current system. The training system is working very hard to ensure that the new cohort of specialists will be spread nationwide across once they finish training. There is also a conscious effort to ensure a comprehensive public health service to addicts but simultaneously utilize the variety of skills within the non-profit sector, as with the UK there are also various actors with NGO and charity bodies working in parallel to the main health service. The key trigger for switch in service design has been the movement of more responsibility shifting to local authorities from hospital services. One area that is still looking to expanding in the future is research and various collaborations around the world are helping support this area of the addictions service.

Sigurd Jonassen

Sigurd is a GP working in Oslo previously attached to the Oslo legevakt (emergency department). He explained in more detail to me the relationship between the public health sector and third-party actors. A big part of this relationship is the provision of aftercare. Whilst a large amount of medical stabilisation post detox happens via the specialist medical services various services across the country supplement the aftercare environment. In Oslo these include A Klinniken in Mariadalsveien, Trasop-klinniken på Lutvann, Incognito Klinikk på Rødtvedt and Blå kors in the Center of Oslo. Blå kørs is a charity which also provides support to those with gambling problems. In Oslo much of the GPs task of management of substance misuse cases has moved across into the medical specialist areas of the health sector and third-party actors in Norway. As this can be a very demanding patient cohort many are very pleased with this decision.

How were services different to the UK

Norwegian services first and foremost must target slightly different substance misuse use patterns. Synthetic cannabis `spice` for example has yet to really make an impact in Norway in comparison to shocking scenes which have recently been witnessed in Manchester Piccadilly Gardens over the past couple of months. In contrast methamphetamine use is much more prevalent across Norway, along with GHB use from my personal impression within the Norwegian health service.

There was also a much smaller alcohol excess cohort within the Oslo services I saw. Whilst both the UK and Norwegian health systems have pushed to try and encourage outpatient management of these patients the UK burden from alcohol misuse appears to be much higher. My experience in the North West of England highlighted alcohol, cocaine and synthetic cannabis as the main present-day issues.

The utilization of personal ID numbers in Scandinavia has provided an impressive resource for population-based studies. This kind of data power is something the UK can only dream off due to public resistance against national ID cards and numbers.

Acute care is more clearly divided up within the Norwegian healthcare system with much less reliance on hospital emergency departments as the key triage point. The use of the Legevakt (emergency room) system in Norway clearly alleviates huge amounts of pressure off the emergency hospital services.

I also noted within the inpatient services a much more democratic approach towards those who have used substances whilst admitted within services. The policies I witnessed in the UK were immediate discharge for anyone caught using or in possession of illicit substances and alcohol. It was telling in Oslo that in similar situations in Norway there was discussion within treatment teams and with the patient with offers of continued treatment always the top priority where necessary.

Admissions were also often delayed by several days in substance users felt that they were not quite ready for admission. Those arriving from custody often were particularly stressed and were open that they perhaps needed a day or so to clear their heads before admission so that could arrive more relaxed and ready for medium to long term admissions.

Other glaringly obvious differences to make between Norway and the UK would be the minimum unit pricing differences and availability of alcohol in shops. The UK has baulked many times when posing the question of minimum unit pricing. Norway on the other hand is one of the most expensive places in the world to buy alcohol and its availability is mainly via a government monopoly of shops the Vinmonopolet. The selling of alcohol in Norway is also limited to early evening during the weekdays and until mid-afternoon on Saturdays, no alcohol is available to buy on Sundays. This contrast starkly with the 24-hour off licence culture in the UK. However other shops within Norway appear to be beginning to take over some selling of lower strength alcohol along with supermarkets as long as the alcohol is of a low percentage.

Culturally within the healthcare system I found that both the patients and the healthcare system are much more introspective and psychological in their approach to health problems. This perhaps stems from a much more socialist society base which is common in Scandinavia and there is a much less individualistic approach to care. Some of the ´mastering groups´ inpatients were involved with appeared designed to push the patients to take charge in the decisions about the future health and direct the treatment plans themselves. In comparison, the UK health system seems much more goal driven with heavy emphasis on acute detoxification but much weaker aftercare structures which are most often driven by third party organizations.

The staffing levels are clearly high in most areas. Norway has around 50% more doctors per 1000 patients meaning doctors often have much more time with patients. The staff environment is also much flatter in relation to hierarchy, no titles are used and the `Toyota` style work model is quoted often to mean that all employees opinions and input

are equally valued. All staff eat together for lunch and all staff attend weekly staff meetings which would be a struggle in comparison within UK health systems

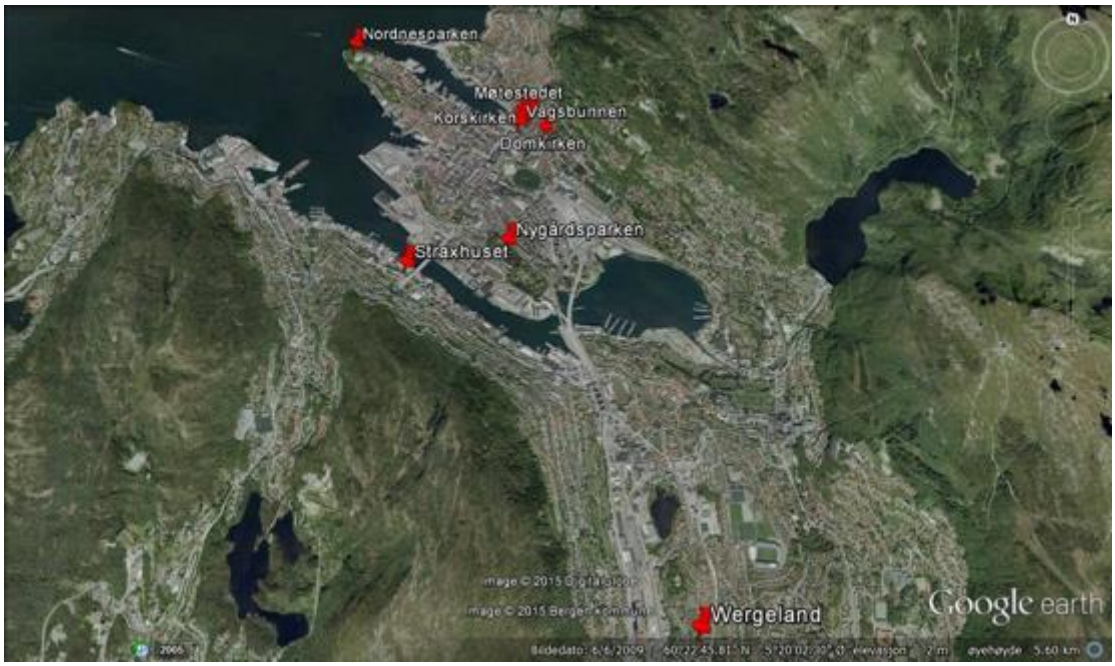
The Drug Scene

A discarded needle on the street

There had been a relatively relaxed attitude towards addicts until recently in Norway's larger metropolitan areas. Open injecting of drugs in public and noise pollution was commonplace. Kongeparken was previously one of the main epicenters in Oslo. Authorities have acted tougher in recent years, closing drug scene epicenter, disrupting and spreading out drug users across the city to make it harder for users to group together and facilitate the selling and use of drugs together. This has worked to good effect in Oslo and Bergen. Here is a case example below on the recent closure of a park in Bergen, Norway's second biggest city.

NygårdsParken (The New Farm Park)

Littering and environmental degradation had deterred locals from using the public space. In August 2014 the park was closed in partnership Bergen Kommune (Bergen Council) and Helse Bergen (Bergen Health Authority) for renovation. Access is now limited to walking through a narrow path in the park. The local authority prior to closure provided new locations for addicts. Replacement sites for drug users it is feared may not be appropriate or well adopted.



Map of the sites of new drug centres for service users to access.

There is limited information about the impact of park closure on the drug situation. Within the drug scene since the park closure 6 months ago a feeling emerged of: 'Creating chaos out of order'. "Hell is paved with good intentions" as Samuel Johnson once said, and this seemed to aptly describe the stress that resulted for drug addicts based in Bergen.

The attitude felt by addicts in the city centre was that they were now: less accepted and had restricted access to drugs yet more encouragement to get into treatment. Controverely along side this, the police force, previously passive and accepting of the drug dealing and consumption in the park was now cracking down an all drug users in the city centre.

Police on patrol in the city centre

The movement from constant and reliable drug availability in one location to a more sporadic limited drug market across the city had moved to a stricter approach from authorities dispersing the drug using population across the city and changing their level of visibility. It was clear that the social life for drug users in Bergen has become more difficult with the loss of Nygårdsparken. Consequently, life has become more stressful and may have led to more risk-taking behavior.

Sadly, the views of drug users were ignored in the process of shutting down the park. There was a sad feeling that authorities were sidelining them within society and making them more helpless.

Marginalization

Minority groups suffering addiction populations are a doubly marginalized group. As separate factors, being a minority group or a drug addict alone is a situation that has the potential to isolate individuals but both factors together have the potential to create an even greater problem.

Co-morbidities whether physical or mental health problems need to be identified to be effectively treated. However, minority groups may find it difficult to articulate these problems in order for them to be addressed.

Those who remained doubly marginalised are more vulnerable to remain addicted due to a sense of social belonging among the minority group drug users. Minority groups with substance misuse issues are a population at high risk of marginalization both due to their minority status and their health issues. In order to combat this problem, at risk individuals need to be effectively identified, reached out to, have their health problems comprehensively addressed and also be supported by the health service and wider society.

A variety of groups have been highlighted as more marginalized than others and the reasons vary between these populations. More research is needed to look at the groups struggling most, in particular, the female population, Romanian, Eastern European and ‘paperless’ patients (those living unofficially in Norway).

It is important to note that a key aspect of the health provision for addiction problems, in Norway as a whole, is that emergency care is free to all regardless of status. However, follow up treatment for chronic disease is only available to officially registered individuals not ‘paperless’ migrants. Alongside this, the disparity described appeared to be particularly related to a lack of patients in second line services.

Focus is needed to ensure this problem group of repeat presenting patients is brought through to second line services, if they are eligible. Access problems occur for numerous reasons. Firstly, via General Practice services which can be hard to access for

minority groups. Secondly 'paperless' migrants refused second line care after coming through the first line acute service are then repeat presenting at the acute services. Interventions need to happen at a system level across the service to help this population.

'Paperless' migrants appear to be getting refused second line services despite there now being some option for continuity of care through voluntary services provided by health professionals at Helse Hjelp til Papirløse (Health Help to the Paperless). With better knowledge amongst health professionals across the addiction services perhaps more care could be provided to the 'paperless' migrant population.

The lack of migrant patient visibility within the system was shown to be system related. The contributing factors suggested were: lack of knowledge within the system regarding routes of referral, variability of obligations towards treating 'paperless' migrants and issues around financial responsibilities within the service.

To avoid the perpetuation of an obscured population, interventions targeting minority groups are needed on a system wide approach due to the multi factorial reasons for their poor visibility.

European perspective

Within Europe only 5 countries offer minority groups full access to healthcare service: Belgium, France, the Netherlands, Portugal and Switzerland. The United Kingdom gives free emergency care but limited access beyond into secondary care in a similar manner to Norway but with no charge for General Practitioner appointments. It is thought that there are currently around 1.9 to 3.8 million undocumented migrants living in the European Union. This is a significant population size many of which will require healthcare. Underlying this variation within European attitude to minority groups is politics, and this topic is likely to be extremely contentious within European cities.

Non-native born populations with substance misuse problems are a minority group at high risk of neglect within healthcare systems. My interviews highlighted that minority

groups with substance misuse problems are experiencing a variety of problems accessing services. Findings suggest that hurdles to service access include: language, organization of services, co-existing health or social issues, along with lack of patient and staff information provision.

Overall impression

Overall the underlying differences can be boiled down to the phrase ´you get what you pay for´. The Norwegian healthcare service costs around double what the UK NHS does on a per patient basis. Substance misuse services are an area most likely to benefit from this additional funding as this has given Norway the freedom to invest more into multidisciplinary teamwork and aftercare. It also gives doctors the luxury of more time with each patient. The NHS is constantly creaking under budget cuts has adapted well to streamlining and cost cutting of services, but I feel this is often most suited to acute care and rapid work up and diagnose services whereas longer term chronic treatment and maintenance in areas such as psychiatry and substance misuse struggle more obviously as cost cutting thins down services into leaner service models.

Conclusions

What can the UK learn from Norway?

Drug addiction treatment in Norway has developed from a social service-based approach leading to a comprehensive multidisciplinary hospital-based treatment service based around a patient rights led service. The development of a medical speciality in addiction medicine has been a long time in the making thanks to many decades of work by senior expects in the field in Norway. Focused services aim to improve the treatment of physical and mental health problems within this patient cohort. The work in Norway highlights both the national and international expansion of knowledge within the addictions field.

High alcohol pricing and restriction of access appears to have a positive impact on health based on Norway's example. However high spending on healthcare and higher standard of living presents a paradox in Norway. It is likely to be this in combination with until a recently a more liberal attitude of drug use particularly in public that has been detrimental to the drug problem in Norway which has become an enormous health issue. The drug service appears for the time being to be well funded and innovative.

To what extent did I achieve my aims and answer my questions

I feel I have managed to achieve all my aims and answer each question that I intended to.

Final thought

Addictions are very difficult to treat, Norway has grabbed the bull by the horns and with an outward looking research strategy embraced best practice from around the world and implemented at home to great effect. This costs money and they are country less constrained by fiscal concerns yet still the UK could learn much from this forward-thinking country.

Recommendations

- Stand-alone specialisation in addiction medicine allows a more focused comprehensive healthcare approach to substance misuse treatment. This could be adopted within the UK without much difficulty and perhaps help solve a recruitment problem within drug services.
- Better integrated local authorities social care services within UK healthcare could result in almost seamless transition between hospital to community care.
- Emphasis on aftercare services helps reduce relapse rates. UK services could do much better with aftercare service though this appears to be very resource intensive in Norway.
- Separate acute overdose/detox services in large cities provides a focused approach to substance misusers. The UK could certainly consider a trial of a similar system perhaps in an area with high overdose rates.
- Greater input from psychology service is highly beneficial for drug treatment services many of whom have co existing mental health disorders. The UK could make much greater use of psychology within the drugs serviced but these required a consciousness funding commitment.
- Multidisciplinary teamwork provides effective 360-degree treatment to complex substance misuse cases. Whilst already in existence in the UK system this could certainly be expanded.
- The Legevakt system (emergency department) relieves pressure from secondary healthcare and empowers primary healthcare to take on more management of acute conditions. This if certainly s model that could be trialled by perhaps strengthening existing out of hours GP services and walk in centres with more on call GPs.
- Comprehensive primary healthcare provides a strong base to be supplemented when required by specialist services. The UK healthcare system is world class, but GPs are a resource that could be utilised more in out of hours care without very much impact om personal working lives due to the large volume of general practitioners that could take on-call shifts.
- Shutting down open drug scenes appears to be encouraging people to seek treatment with substance problems. This has been trialled in some areas of the UK but hotspots such has Piccadilly I Manchester require more resources to be effective.

Implementation of dissemination plans based on the findings.

Most importantly I have set up and exchange programme between Liverpool and Oslo Addiction services. This will begin with a visit to Liverpool by one of the psychologists from the Oslo at Ullevål hospital team to Liverpool to share best practice. Liverpool has one of the worst addiction populations in the United Kingdom. I plan to bring back knowledge from this experience in Norway and present it to the addictions team in Liverpool who are keen for my further input. I will also be contacting regional and national policy makers to inform them of my findings, including the local commissioners and NHS England along with Public Health England.

I have kept a blog during the period I am in Norway and am writing an article to publish both in the most appropriate medical journal but also within a mainstream media newspaper. This way I hope that my findings will have impact both within the health service and the wider community.

I am also aiming to work as a doctor in addictions in the UK once I have completed my training This experience has been invaluable to help me formulate a future UK service that works as effectively as possible. The findings I make in Norway will help shape my future working career.

I have discussed this project proposal with two Psychiatry Consultants in addictions within Mersey Care NHS Foundation Trust, which provides the public addiction health service in Merseyside. They are interested in my findings and how they could help optimize services in their region. I have also met the head of drug addictions treatment in Manchester at the Rapid Access Alcohol Detox Acute Referrals RADAR centre, Geraldine Strathdee the clinical head of mental health for NHS England and am in contact with Owen Bowen Jones one of the chairs of the Faculty of Addictions at the Royal College of Psychiatrists. I have also contacted newspapers and medical journals which may be interested in publishing this work and aim to present this work at a national medical conference.

Full itinerary of my trip

My first week was spent orientating myself within Oslo University Hospital services with is the largest hospital trust in Scandinavia and made up of three main sites Aker sykehus, Rikshospital, Radiumhospitalet and Ullevål sykehus. I was based mainly within the Klinikk Psykisk Helse and Avhengighet department which is the umbrella organisation for addictions linked with psychiatry from a managerial perspective. I spent half my time observing the stabilisation service post detox at Ullevål and then the other half of my time within the acute detox service at Aker. Alongside this I arranged interviews and visits within other aspects of the health service such as SERAF (addictions research team in Oslo), Legevakt (community cottage hospital service), Helse Sør-Øst (Strategic Health Authority for Oslo), Helsedirektorat (NHS England equivalent) along with a variety of community services.

My scrubs whilst at the hospitals in Oslo. White are still in use in Norway, plenty of useful pockets!

Index of organizations visited

Aker Sykehus

Ullevål Sykehus

Helse Sør-Øst

Helsedirekorat

Oslo legevakt

SERAF

Local GP services