Multidisciplinary team working in an adult male prison establishment in the UK

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PRACTICE

IN BRIEF

- Suggests an inter-professional relationship network (IRN) can improve patient-centred care.
- Highlights an IRN in a primary care setting, such as a prison establishment, is useful for identifying vulnerable patients with specific care needs.
- Informs staff working as part of an IRN reported increased satisfaction regarding patient care.

The first two articles in this series exploring the oral and dental health of male prisoners in the UK demonstrated how the general and oral health of prisoners is compromised compared to those of a similar age who are not prisoners. In caring for the oral health needs of this group the high demand for emergency dental services often precludes the delivery of preventive and routine care. Comprehensive oral care for this population requires a level of training to gain the skills and knowledge to manage prisoners' complex medical, dental and social needs and the heightened dental anxiety that prisoners exhibit. The type of training that might be required for prison dentistry will be discussed in the final article. This article will describe a number of cases selected to demonstrate the complex problems presented by male prisoners in Her Majesty's Prison (HMP), Brixton. This article will also discuss the establishment of a primary care inter-professional relationship network (IRN) developed within a prison setting involving a dentist and other healthcare professionals. After informal discussions between the dentist and other prison healthcare professionals, it became apparent that vulnerable patients were not accessing dental services. These patients also cancel/fail to attend their dental appointments more frequently. In order to improve access and provision of dental care for this group of prisoners, an IRN was developed between the dentist, diabetic nurse, forensic psychology team, communicable disease lead, general medical practitioner (GMP), prison officers and healthcare manager within HMP Brixton. The nature of the IRN is presented along with reviews with relevant patient cases. The IRN allowed information sharing between professionals and an open care culture. The network was valued by prisoners. Prison populations show higher rates of general and oral disease, therefore an IRN can help to identify vulnerable groups and allow healthcare providers to give appropriate, targeted and focused care in a timely fashion.

INTRODUCTION

The first two articles in this series demonstrated how the general health and oral health of prisoners are compromised in comparison to those of a similar age who are not prisoners. Therefore, the need for dental care is high in prisons. Service provision faces challenges such as funding, staff limitations and recruitment and retention of appropriately skilled staff. Managing patients with complex medical, social and psychological problems requires training[1] and experience by the clinical team and input may be required from multiple sources to allow effective care to take place.[2] Inter-professional relationship networks (IRNs) can aid this process. For the dental team IRNs can allow consistent oral health messages and behaviours to be embedded within general health messages, behaviours and healthy living activities for all prisoners by all services. An IRN can also allow timely cross referral between specialists. It can identify vulnerable individuals within groups and target appropriate care directly, saving time and allowing high need individual patients to be prioritised.

The aim of this article is to explore the reasons for establishing an IRN between the dental team, diabetic nurse, forensic psychology team, communicable disease lead, general medical practitioner (GMP), prison officers and healthcare manager. The case scenarios will also highlight patient groups that require special care dentistry. Multidisciplinary teams exist in acute hospital settings commonly but little is written of their existence in primary care settings.

HMP Brixton is a local male prison (category B). It houses a mix of remand (unconvicted), awaiting trial or sentence, short-term and long-term (convicted) prisoners. It has a high turnover of prisoners due to the large number of new daily receptions and the fact that remand prisoners (who comprise 50% of its population) stay an average of only 35 days.[3] The prison has five main residential units (A, B, C, D and G wings), six segregation units and a refurbished healthcare building. The operational capacity of the prison is 805, which is 15 over the certified normal accommodation (CNA) of 790 (including the beds on the inpatient unit).[3] The healthcare facilities in HMP Brixton, at the time of this study, provided a number of treatment services such as dental, substance misuse service, genito-urinary medicine (GUM)/human immunodeficiency virus (HIV)/Hepatitis, diabetic, podiatry, physiotherapy and a pulmonary tuberculosis (TB) service. The health centre included a medical day care centre, one dental clinic and general practice (GP) surgeries with a common waiting room. The results of this collaboration are presented (Fig. 1) and an example of how IRN works is presented in the case scenarios.

Vulnerable patients within the prisoner group fulfilled one or more of the criteria

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Refereed Paper
Accepted 25 April 2014
DOI: 10.1038/sj.bdj.2014.646
©British Dental Journal 2014; 217: 117–121

presented below. Vulnerable patients were defined by members of the team as prisoners who:

- Are admitted to the hospital wing (usually with severe mental illness)
- Have complex medical problems (such as multiple co-morbidities, blood-borne viruses as well as recreational drug-use withdrawal)
- Have uncontrolled systematic disease (such as diabetes and epilepsy)
- Have learning difficulties
- Have other disabilities (for example, physical or sensory impairments).

This classification of vulnerable prisoners within the main prisoner body was accepted by the IRN group members. Referral criteria were set and approved by the members. The team process followed West-Burnham's recommendations to have 'lateral communication, collaborative decision making and outcomes in terms of action'.[4] It was felt that such a team approach in HMP Brixton would remove barriers to care for vulnerable prisoners and improve dental care provision for this particular group. The case scenarios (Mr A to Mr E) will describe patients who fulfilled a number of these criteria and highlight some of the challenges that arise when delivering care to this group of patients.

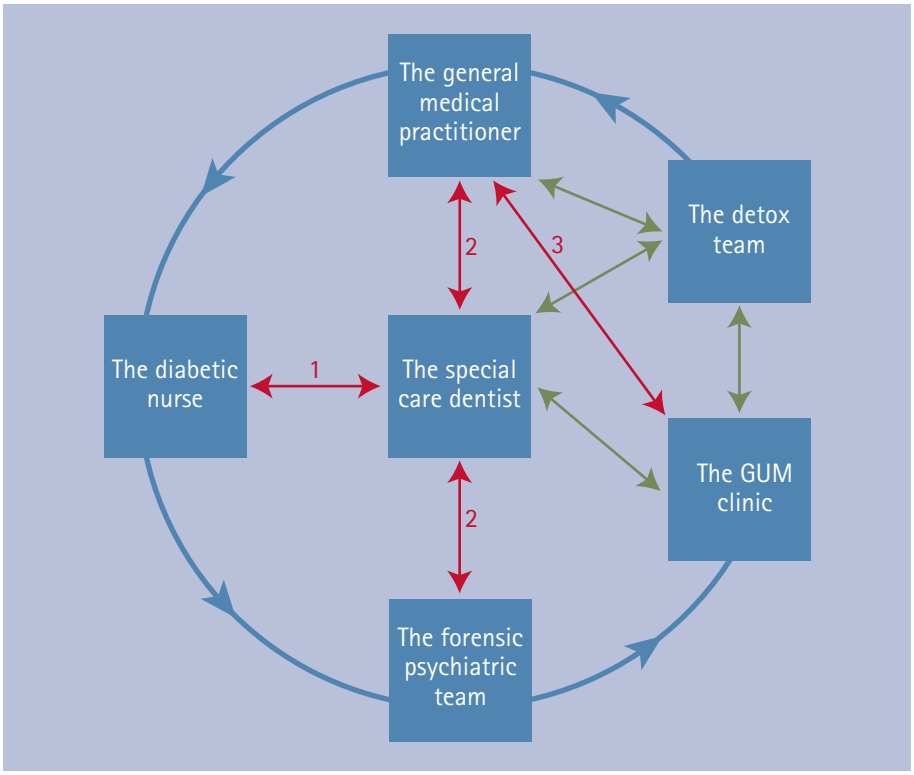

Fig. 1 An example of the inter-professional relationship network, to which Mr E was referred. The numbers show the order of referral

PATIENT CASES

Mr A – difficulties in communication

Mr A was a 36-year-old man who was overweight. He appeared confused and apprehensive on arrival at the prison dental surgery. Mr A complained of pain associated with a lower left carious wisdom tooth. The patient's medical history included a moderate learning disability and sickle cell anaemia. No known allergies or medications. Mr A had an irregular pattern of dental attendance. He consumed sugary snacks and drinks more than six times a day. He only brushed his teeth once a day (in the morning before breakfast). When Mr A was asked about his previous occupation, family background and current prison status, he was unwilling to share information with us.

There are several challenges to the dental team here. Firstly, it was difficult for healthcare professionals to treat him due to his lack of engagement with history taking. The lack of communication made it difficult to access the nature, duration and severity of his problems or general health status. This had major implications for treatment planning and consent. Obtaining a medical history and consent was difficult and required collaboration with other healthcare professionals and prison staff. Once this was achieved, it was noted that there was no documentation about his sickle cell anaemia in his medical records. This information is important as infections might predispose to crisis. During his dental treatment Mr A was constantly moving and interrupted the treatment sessions with multiple questions. This behaviour indicated anxiety and perhaps his dental anxiety may have been better managed with conscious sedation (CS). However, CS was not available at HMP Brixton.

Mr B – complex medical history and dental fear

Mr B was a 41-year-old man who avoided eye contact and became upset when questions were asked of him. He appeared to be disorganised in both thoughts and action. He initially refused to sit in the dental chair.

His complaint was sharpness of retained roots in the mandible. Mr B's medical history revealed infections with HIV, hepatitis B and C. He had also been given a diagnosis of a 'borderline' personality disorder possibly on the autistic spectrum. He had an allergy to penicillin. On the initial assessment the patient did not inform us about his previous recreational drug use and his current medications. He was on a methadone replacement programme. His other medication was the antibiotic Septrin, which was prescribed for his open leg ulcer as the result of a previous deep vein thrombosis (DVT). The wound had been infected with MRSA.

After the initial consultation the patient relaxed somewhat and was slightly more open to share information about his dental and social history. His last dental visit was over 25 years previously for extractions under general anaesthesia. Mr B did not brush his teeth at all. He also has never worn dentures.

Mr B was transferred to a detention centre at the age of 12 and had spent 20 years in prison. He had never attended school regularly and he had no qualifications. He had been unemployed all of his life. He had a history of alcohol abuse as well as intravenous drug use. He smoked 20 cigarettes per day.

Mr B presented the dental team with some common challenges such as dental anxiety and being initially uncooperative by refusing to inform us about medical and dental conditions. However, in Mr B's case he seemed not only to be disorganised in thoughts and actions, but also confessed to the fact that, as a result of his mistrusts for the medical profession, he refused to reveal and comply with medical treatments. Consequently, he was unwell. There was also concern about Mr B's capacity to comprehend and understand the information that the dental team provided for him and, thus, to give informed consent. The team lacked the essential information with regard to his general health such as liver function tests, haemoglobin, platelet and CD4 counts as well as viral load that is commonly required before extractions. This information was discussed via the IRN.

This gave the dental team an opportunity to obtain the necessary information and commence dental treatment.

The dental treatment was compromised by the patient's anxiety and by pronounced gagging. The treatment might have improved and been more comfortable with CS had it been available in the prison.

Mr C – complex medical history and extensive oral disease

Mr C was a 42-year-old Moroccan man who appeared shy (or perhaps slightly embarrassed as he covered his mouth when he spoke). He had been referred from the 'detox clinic' as he has been complaining of pain from his '*broken down teeth and roots*'. The pain was more evident in upper maxillary premolars and molars. Mr C was diagnosed with HIV some years ago and was also hepatitis B and C positive. He refused to comply with various consultants' advice regarding his medical treatments from time to time, especially when he was feeling depressed. He was taking the following medications: Combivir, nevirapine, Septrin, omeprazole, methadone (not sugar free) and diazepam. Unlike Mr B, Mr C was very open to discussions about his life experiences, which he explained in limited English.

Mr C claimed that he had no previous experience of dental treatment and he had never visited a dentist before. The reason was limitation of available services in his country of birth. Mr C had difficulty in finding employment, because he was addicted to heroin and cocaine, which he used intravenously. He also had poor oral hygiene. This was evident intraorally as there was rampant caries in all remaining teeth. Caries was linked not only to the sweet methadone syrup, but also to previous abuse of illegal drugs (and concomitant high sugar intake). Mr C didn't have any knowledge of the causes of oral disease, its influencing factors or preventive regimes.

Mr C had been aware that his poor oral condition had progressed rapidly over the past two years, which led to the fracture of many of his teeth. Mr C recalls the start of his worsening oral health coincided with the time that his wife and his family disowned him and consequently he became homeless. Since then his depression had worsened and he had become disengaged from treatment for his HIV. His low CD4 count was a concern regarding post-operative infections and healing as he was immunocompromised. With hepatitis there are associated liver function problems, which in turn have a coagulation risk following extraction. Mr C's dental treatment was planned to include clearance and construction of a complete denture for both arches. However, before commencement, the relevant specialists would need to be consulted. Information was sent via the IRN, which allowed coordination of his care centrally.

Mr D – management of oral disease in the presence of chronic debilitating disease

Mr D was a 33-year-old man who appeared pale, weak and fatigued. He was referred urgently by the medical team, as he fulfilled the referral criteria for a vulnerable patient. Mr D had lost 7 stone during the past few months. The weight loss was due to TB, which was diagnosed a month earlier. His medications were listed as rifampicin, ethambutol, pyridoxine, domperidone and prednisolone. Additionally, Mr D was regularly taking high calorie energy drinks (Ensure®) to stabilise his weight loss.

At the assessment session the patient felt too unwell to give a detailed history and enable us to perform an examination. The reason for referral was his broken down wisdom teeth. Mr D was an irregular dental attendee and could not recall his last dental visit. His memory was poor due to his previous addiction to crack cocaine. He smoked up to 15 cigarettes per day.

According to Mr D, although he had GCSEs, he was unable to gain employment for several years before his arrest. This imprisonment was his first.

One of the main challenges to the dental team was to assess the risk of his TB. Although the patient's infection wasn't contagious when he sought dental care, the team handling this case felt that a full risk assessment was essential. Additionally, Mr D was considered to be immune compromised and his steroid dose was relevant to dental care. Due to his dental anxiety dental treatment sessions were kept short with small objectives for each session.

The IRN worked together to allow the individual elements of Mr D's dental treatment to be carried out. The surgical removal of his wisdom teeth was planned relevant to his general health with the team. The high risk status was tackled with help from the medical team.

Mr E – traumatic childhood, dental anxiety, eating disorder, poorly controlled diabetes

Mr E explained that his general anxiety and panic attacks had its roots in a difficult childhood. His mother suffered from bipolar disorder and self-harmed. His father was an alcoholic and was violent towards him and his mother. The family moved constantly as his father was 'on the run' from police. This resulted in Mr E missing a great deal of school. While he wasn't at school he was stealing with his parents. Eventually, he left school aged 15 with no qualifications. He was addicted to cocaine and misused alcohol. This resulted in multiple prison sentences which worsened after both his mother and the mother of his children died. He was diabetic and asthmatic.

The challenges to the dental team were partly due to his uncontrolled medical status and depression, which affected his mood and behaviour. When he was feeling depressed he refused to attend for medical and dental care. He would also lose interest in addressing his difficulties and stop attending his therapy sessions. However, after some initial difficulty Mr E started to engage in his oral care and attended his dental appointments regularly. The reason for his attendance was his desire to improve his appearance and to regain his self-esteem.

There was risk of a medical emergency (such as panic and asthma attack as well as hypoglycaemia). The exacerbating factors for this were investigated and became known to the IRN members and the times of the appointment were coordinated to meet his needs. Mr E was told to inform the team once early signs of hypo/hyperglyceamia became apparent. His dental treatments were also complex due to extensive erosion and periodontal disease.

When the patient finally declared his health status and behaviours, a detailed discussion about the lifestyle issues, which affected his dental health took place. Information about erosion (as an effect of regular vomiting from past alcohol abuse and current bulimia) and increased habitual bruxism due to past drug abuse were given to him. The patient was also informed about the need for compliance with medical treatment. The importance of involving other members of the IRN in his health issues was stressed to the patient who subsequently agreed to accept referral to other relevant team members for improvement of his general and dental health. Collaboration between IRN members allowed several of his general and dental health challenges to be addressed.

WHY ARE IRNS IMPORTANT FOR PRISON GROUPS?

As it has been demonstrated in some of the cases mentioned above, healthcare professionals often face multiple challenges when treating patients in a prison establishment. In HMP Brixton, the lack of dental services for vulnerable prisoners had been highlighted at a clinical governance meeting. The literature and data on prisoners' general and

oral health, both locally and nationally, were presented to the HMP Brixton prison healthcare staff in a study session organised by the oral healthcare team. In this way staff gained an understanding of the situation and had an opportunity to have questions answered. The advantages and possible problems of introducing an IRN were discussed as well as different options explored.

An IRN could assist in provision of best care both orally and generally for patients in particular those with multiple health and social issues. A 'group voice' can be stronger than an individuals and the skills, knowledge [4] and collaboration of a range of healthcare professionals is considered to be the best way to achieve optimal patient-centred care. Later, collaboration with other members such as prison healthcare staff, security officers, the prison governor and the head of healthcare along with members of the clinical governance team was sought to strengthen the remit of the group and widen participation in decision making.

DISCUSSION

The main benefit of the established IRN was that the oral healthcare team gained access to information sharing with other clinicians seeing the same patient. The development of the IRN allowed the identification of vulnerable prisoners within the prison population. The aim was to establish a local infrastructure for the delivery of oral healthcare to the most vulnerable prisoners; 'the model service'. It had the following mission statement: being a fair, holistic, efficient, audited service where the members, together with the patient, make informed decisions about the patient's best interests.

The IRN also helped to overcome the historical isolation of visiting part time services (such as dental and the HIV clinicians from Kings College Hospital) and allowed collaborative, holistic and clinically informed specialist care delivery to appropriate patients. The programme meant that the special care dentist could see 'vulnerable' prisoners referred by other members of the IRN group on an 'urgent care' basis and avoid long waiting lists. The justification for this prioritisation was that there was a chance that the patients' conditions could deteriorate as a result of waiting for their dental care. But the benefit of the IRN became evident as multi-directional working developed. Referrals occurred between health teams to benefit patients in several areas and 'oral health' became part of other teams' awareness and understanding.

The establishment of the IRN inevitably increased administration with a greater level of referrals, but it also allowed multidisciplinary collection of data for audits and research. Posters gave information about our referral criteria and the NHS criteria[5] were displayed on notice boards in each prison wing.

The programme was evaluated after one year by informal interviews with service users and staff feedback. The programme was recognised by the Prison Dental Inspectors and the Department of Health document *Reforming prison dental services in England – a guide to good practice*[2] as an example of best practice.

The secondary outcome of the successful establishment of the IRN was staff satisfaction for provision of holistic care and improved working relationships. This provided the opportunity to gain an understanding of each other's roles. No additional funding was requested or required for this programme.

WHY DO IRNS SUCCEED?

The common understanding of the group was that health professionals share 'an increasing overlap of knowledge and skills'[6] and yet this should not jeopardise their own individual professional identity. The individual identity of healthcare professionals in prison settings can be weak because they usually work in isolation and often on a part time basis. However, as HMP Brixton is a small 'community', the opportunity for its staff to build awareness of other healthcare professionals' activities remained.

The close environment in a prison and the complex nature of the prisoners' general health needs can also allow healthcare professionals to build a practical process to support, manage, develop and motivate colleagues. All healthcare professionals should strive to make a significant effort to build and maintain relationships[7] and widen their perspective regarding the roles of others. In addition, sharing the same 'bigger picture' can enhance team members' personal confidence to network, to develop professionally and to emphasise the importance of sharing common attitudes toward each other and their patients.[8] This could easily translate to other areas of primary care healthcare provision.

The success of this project related to the skills of those individuals belonging to the IRN, who were flexible, multi skilled and good team players while still feeling capable of expressing an individual point of view and carrying that view for the team's benefit. The HMP Brixton IRN matches Tomlinson's[9] definition of a good team: a good team (or inter-professional relationship) will be established where its members are 'stable, and used to working with one another'; in other words well established. Tomlinson[9] also describes the qualities of team members as people who are 'used to working flexibly to meet targets and capable of making good use of the complementary skills of their members'.

Implementation of newly introduced infrastructures and work stream modifications can meet resistance from staff. In this instance the security team members' representative had reservations that prisoners might find this programme unfair and complain that vulnerable prisoners would get preferential appointments.

THE ROLE OF THE TEAM LEADER AND OTHER MEMBERS OF THE TEAM

The oral healthcare provider (EH) took the role of the 'manager' in this programme simply because of her role in initiating it, her background knowledge and experience in the area. In order for the programme to take place, a leader needs to promote enthusiasm in the other team members, listen to their proposals and different points of view, suggest compromises and offer flexible approaches and solutions. The qualities of leadership are most important here, rather than possible speciality in the hierarchy of the group.

CONCLUSION

The prison population, in particular vulnerable prisoners, are disadvantaged in relation to the majority of non-prison populations. They show higher rates of general and oral health problems/disease.

High levels of normative oral health need can produce pressures on prison oral healthcare services and the unpredictable nature of remand prison life can make the delivery of services difficult. The delivery of the service will improve if it functions as part of a multidisciplinary healthcare team[8] and an IRN can help to identify and focus the care for vulnerable patients and prioritise their treatment.

The case scenarios highlight the benefits of an inter-professional relationship network within healthcare systems in prison establishments in helping to improve patient care.

Dr Heidari would like to thank all members of the inter-professional team, especially Ms O'Shea, Ms Brown and Mr Ransome for their help and support. Dr Heidari would also like to thank her dental nurse (Mrs Barber), staff in HMP Brixton, Kings' Community Special Care Dentistry (CSCD) and the head of CSCD services.

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