- Structural and economic factors, where few opportunities for contracted employment
 may complicate case finding and case management: casual work, for example in the recycling sector is extremely labour intensive, allowing few opportunities to attend
 screening initiatives or follow-up clinics.
- Low levels of entitlement to livelihood support among the homeless population results in homelessness, which again optimises conditions for the development of latent tuberculosis and the spread of tuberculosis infection.

Service-based requirements for tackling tuberculosis in urban areas

- A need to increase the political will to invest in and facilitate the development of
 effective tuberculosis services in some areas.
- Encouragement to standardize levels of service provision, beyond the obligations set by the Tuberculosis Law. Lack of standardisation has led to inconsistent care and management of clients with tuberculosis.
- Increase levels of development of joint working practices between major stakeholders, especially between public health and welfare departments. An integrated approach toward staff training should be considered from the outset.
- Engage with NPOs and grass roots organisations that work directly with those at risk of tuberculosis.

Discussion: The provision of services and the role of Public Health Nurses

The management of tuberculosis within healthcare services has been enhanced as a result of widespread adoption of Directly Observed Therapy (DOT) meetings and Cohort Analysis. This has improved the co-ordination and integration of hospital and public health services with regard to the case management of tuberculosis and has introduced an effective form of performance management In terms of client benefits these initiatives have encouraged better continuity of care, discharge planning and follow-up those with tuberculosis.

Broader case management of clients that come from homeless or other disadvantaged backgrounds remains a concern. Issues such as shelter, finance, security and addictions remain major obstacles to successful treatment completion for many clients. A more inclusive approach to meeting these broader needs have been adopted in some areas with a beneficial effect on outcomes.

Making tuberculosis a priority in all areas that carry a heavy burden of tuberculosis has also proved challenging. Differential commitment to tackling tuberculosis at local and city levels has resulted in inconsistent service provision, leading to high rates of loss to follow-up and treatment failure in some areas.

The current demands made of Public Health Nurses may also have an impact upon the management of clients with tuberculosis. These problems may be particularly acute in areas where rates of tuberculosis are high, and PHNs still have a commitment to generic working roles. Some areas have benefited from commissioning PHNs to work specifically in the area of tuberculosis, resulting in much stronger case management. These nurses are in a critical position to be able to plan and co-ordinate care around the needs of the patient, leading to improved treatment outcomes.

Public Health Nurses may also have a role to play at a more strategic level. Under the current system of decentralised service structures, Public Health Nurses may be uniquely placed in a position where they could influence consistency of service provision and encourage measures to improve collaborative working.

Public Health Nurses would be able to influence these issues by acting on two levels: firstly, by working to standardise the services and skills that they - as professionals – have to offer to those affected by tuberculosis; secondly, by working together, PHNs could positively affect the decision-making agenda around tuberculosis at local and municipal levels.

Improving on the standardisation of care offered to clients with TB by PHNs would be an important end in itself, as it would improve levels of continuity of care and consistency of service provision across administrative areas. Institutions involved in the training and development of PHNs would have a critical role to play here, in both facilitating the establishment of standards and in providing the resources to teach and validate such a scheme. Once such consistency is attained, it is of course important that it would not function in a vacuum; other strands of work that are critical to the control of tuberculosis would also be required to respond consistently.

A scheme to standardise PHN-based service provision for tuberculosis might be organised through existing conferences and forums, but is also likely require extra resourcing through workshops and other meetings. The process will need to be rigorous in its adherence to principles of good case management and effective disease control. This rigour should equally be applied to development of a democratic process within the public health nurses forums. The political authority that this will give the nurses could be pivotal in its influence of decision-making at the level of Public Health Centre Head Quarters and local / city government.

Standardising levels of service provision for PHNs would be the first step toward compelling broader service consistency. The organisational advances made in the course of developing such a scheme would also mean that PHNs would be in a much better position to both agree to

and work together on influencing strategic decisions about the management of tuberculosis at a higher level.

The role of RIT:

As an educational institution of international renown and as a nationally respected authority on tuberculosis, RIT's role in the development of such a scheme would be critical to its success. It would have an invaluable role to play at the level of capacity building (at an organisational level) facilitation, and development of appropriate training programmes.

As well as having a strong international role in the development of TB control strategies in the majority world, RIT is also nationally well positioned to affect the development of services in the domestic context, where tuberculosis disease is most entrenched among the homeless and impoverished sections of the population.

RIT has the skill mix to make a positive impact in deprived areas where the TB burden is heaviest. The Research Institute is adept at working closely with grass-roots organisations and in conjunction with this it has sought to ascertain how best to engage and work with local populations in international settings. This kind of work is vital if appropriate services are to be developed for groups that carry the heaviest burden of TB in Japan.

- To build stronger links with grass roots and advocacy-based organisations (including labour unions?), so as to develop joint working with more established NPOs and statutory services.
- To work with these groups to establish needs assessments and develop services and case management appropriate to the client group.
- To work with grass roots groups and other NPOs to improve early case finding: establish high levels of vigilance for tuberculosis among those that work most closely with the client group; develop rapid referral systems for those suspected as having tuberculosis; work with healthcare and welfare providers to integrate screening services.
- To monitor the implementation and evaluate the success of novel working practices and to assess their fitness for transfer to other areas.

Comparative Study of 'Hard-to-Reach' Groups in the UK and Japan

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Research Brief

This preliminary report describes a comparative, exploratory study of 'kekkaku' (TB - Tuberculosis) in 'hard-to-reach' groups and the associated supporting structures in both the Japanese and UK contexts. In the UK such structures are usually found within both the statutory and voluntary sectors (in Japan, the nearest equivalent might be NPOs²). The following observations are based on field work conducted between the 11th and 26th of January 2005 in three cities in Japan including Tokyo, Nagoya and Osaka and my experience as coordinator of the TB Link project based in the TB service at University College London Hospital's NHS Trust. The organisations in this field study and contexts were chosen to reflect examples of how the public and private sectors interface in relation to TB and homelessness with a view to identifying models of best practice.

More specifically the aims of the study were to:

- i) Describe the context of TB in hard-to-reach groups in the Japanese context;
- ii) Identify the major stakeholders involved in homelessness and TB;
- iii) Describe their different remits in relation to homeless populations at risk of TB;
- iv) Identify linkages and areas of collaboration between the different stakeholders;
- v) Identify third sector³ developments in TB control and management with specific reference to hard-to-reach groups.

¹ The term is used in this report to denote those groups, which experience difficulties gaining access to health and welfare services. Amongst other reasons, this is attributed to social exclusion and a failure of the welfare services to offer an appropriate service response to the needs of homeless populations.

² The term NPO (Not for Profit Organisation) in this report is used in the broadest sense of the meaning to include non-profit making organisations. The reader is referred to Yamaoka, for example, for a discussion of the issues in Japan (see 'The Japan NPO Center: Developing Japan's Non-Profit Sector and Constructing a New Civil Society: Articles/Partnership Updates. CGP, volume 15. www.jfny.org/cgplink/vol15/articlesvol15.html. Accessed 31-08-2004)

³ The term third sector is used broadly to describe service providers, which are not part of government nor the private sector. The author acknowledges that funding sources may blur this distinction.

The study was also conducted with a view to developing further research on the potential role of the third sector in relation to TB advocacy and social mobilisation.

Structure of the report

The report is divided into seven sections i) The context of homelessness and TB; ii) Health needs of homeless populations; iii) Access to health and welfare services; iv) Management of TB patients; v) Awareness of TB in the homeless; vi) Joint working; vii) Conclusions and recommendations for further study.

i) The context of homelessness and TB ('kekkaku')

Japan

Japan adopts a strict definition of homelessness and the official figures reflect the actual street homeless (rough sleepers) population. The first national census of the homeless carried out in 2003 estimated the numbers of homeless at 25,296 in 581 municipalities across the country with 70% concentrated in Tokyo and Osaka. Estimates of the numbers of homeless are: Tokyo, 5,927; Nagoya 1,788; Osaka city 6,603 with another 2,200 living outside (i.e. Osaka prefecture). However, given there are an estimated 21,000 day labourers living in Osaka, mostly men aged 50-60 without stable income or housing, the number of homeless is likely to be higher (e.g. 10-12,000, personal communication, Dr Watanabe).

Different types of homeless populations exist, but in the main comprise of ex-day labourers ("rodosha"). There are four areas where the 'old' or 'traditional' homeless live. These areas have high concentrations of cheap lodging houses (flop-houses) and originally served as daily labour markets ("yoseba") where the construction companies come to hire the day labourers. These are: Kamagasaki in Osaka; Sanya in Tokyo; Sasashima in Nagoya and Kotobukicho in Yokohama City. In the Sanya area of Tokyo 65% of the population is over 65 (personal communication, Mr Sato, The Johoku labour and welfare centre). Conversely, 'the new homeless' – or the 'recently fired', who are seen as the victims of the more recent economic recession, live in the parks and train stations, often in abandoned cars and 'blue' tents. The 'newcomers' are a younger age group (40-50).

However, there are also differences between these areas with the Kamagasaki resembling more of a ghetto. In the late 1980's at the height of the building boom (the bubble), 8,000 men were hired and now, fewer than 2,000. In Kamagasaki there are 200 flophouses where rooms cost 1,000 yen per day (in Sanya, approximately 2,000 - 2,500), which, for many labourers would be unaffordable. In Sanya, the homeless and housed population are more integrated.

In drawing a comparison between the UK and Japan, an important difference is the number and epidemiological profile of people affected by TB. In Japan in 2003 there were 31,638 TB notifications representing an incidence of 24.8 nationally. However, as in the UK, there is regional variation with cases concentrated in urban areas such as Tokyo (23 ku) with an incidence of 37.5; and the Cities of Nagoya and Osaka with rates of 37 and 68.1 per 100,000 respectively (personal communication Ms Ohmori, RIT). The prevalence of TB in Japan is attributed to an ageing population experiencing reactivation of the disease from early childhood illness or exposure and, the increasing numbers of homeless people that have arisen as a result of the economic depression. The economic downturn has particularly hit the construction worker or day labourer community and those with unstable employment or suffering illness or injury. This, compounded by a lack of adequate and affordable housing, forces many labourers out onto the streets. Ninety per cent of cases of TB in 2001 were homeless men aged 40-60 (personal communication Dr. Shimouchi, Health and Welfare Bureau, Osaka City).

UK

The number of homeless in the UK has been estimated at between 4 and 12 per 100,000 in the 1990's ⁴. Estimates of the numbers of homeless in London in 2002 ranged from 50,000 in temporary housing including 7,000 in Bed and Breakfast hotels to 380,000, a figure which includes the 'hidden' homeless living in squats, bed and breakfast accommodation or with friends. It is estimated that there are 267 rough sleepers in Greater London.

The changing epidemiology of the homeless over the past 30 years in the UK means increasing numbers of young homeless (under 21s), women, people from minority ethnic groups and asylum seekers are now represented. Around 25% of rough sleepers are aged between 18 and 25; 6% are over 60 and 90% are male. The broader definitions of homelessness adopted by the UK would include the many day labourers in Japan who live in the 'flop-houses' as this accommodation would be viewed as temporary, insecure and, in the main, unsuitable.

Nationally, TB in England has increased by 25 per cent over the last 10 years with a notification rate of approximately 13:100,000. Over 6,000 people were newly diagnosed with TB in England in 2002 with 40% of cases occuring in London and approximately 50% of drug resistance is concentrated in the capital. Around 350 people in England die each year from the disease. Most at risk of contracting TB are people who have lived or worked in parts of the world with a high disease prevalence. Around seven out of every 10 people with TB come

⁴ See http://hq.unhabitat.org/en/uploadcontent/publication/hs-599-03.pdf (Accessed 07-02-05). These figures do not include people staying with friends and relatives or 'unconventional dwellings'. It is unclear whether the high rates are due to better monitoring and recording of homelessness.

from an ethnic minority group and nearly two-thirds of people with TB were born abroad. Half of the TB patients who were born abroad are diagnosed with the disease within five years of entering the UK. Drug resistance to one or more drugs is about 6% and multidrug resistance is about 1%.

TB has made a dramatic comeback in London in the last decade with a third of the 33 boroughs experiencing rates greater than 40:100,000. The reasons for the resurgence of TB in London are multifactorial and include increasing social and economic deprivation, homelessness, HIV, migration from countries with a high TB prevalence and a failure of the services to adapt to the changing epidemiology. Rates of TB are particularly high in homeless populations with a prevalence of 2% found in one screening of cold weather shelters. A pan-London point- profile of TB patients found 12% of patients receiving TB treatment were homeless.

ii) Health needs of homeless groups

Japan

One study of health needs involving 1,938 homeless men living in a welfare institution in Tokyo found that the co-morbidity of alcoholic psychosis/alcohol-dependent syndrome and liver disease and pulmonary tuberculosis were greater than the average for both Tokyo and Japan. The risk of Pulmonary TB was twice as likely in construction workers. Other disease patterns found were diabetes mellitus (DM), fractures, dislocations, sprains, strains, hypertension and cerebrovascular disease.

The disease patterns identified in a sample of 3,000 rough sleepers receiving a health check in Osaka city were: undernourished due to food shortage; severe hypertension; anaemia, hypercholesteremia and DM and liver problems related to drinking alcohol. The causes were attributed to poor access to health care and the stress of not having a job or place to live, which resulted in people using alcohol. Dental problems as a result of poor diet were also identified (personal communication Dr Watanabe).

In a survey of the health needs of the homeless conducted in Nagoya in 2003, the average age of the homeless day labourer was 56.6 years with 17% older than 65 and 16.6% younger than 50. The major source of income was collecting cans and magazines for recycling. Just under two thirds had a monthly income of less than 30,000 yen. Approximately half of the sample reported health problems but only 20% saw a doctor with the remainder doing nothing or self-treating with medicines purchased in the market. Other illnesses were: high blood pressure (11%); DM (5.5%); alcoholism (4.8%); hepatitis (3.5%); herniation (8.1%); duodenal ulcer

(5.9%)⁵. Similarly, a nurse at the welfare patrol office in Osaka suggested the health issues were hypertension, DM and liver malfunction.

Furusato-no-kai in Tokyo conducts regular needs assessments, which highlight psychological problems.

It is estimated that two-thirds of TB in the Sanya area is complicated with DM. This was attributed to age and high calorie diet including alcohol consumption. Complications of DM included renal problems, blindness and complications of infection (e.g. gangrene), When specifically asked about TB most officials interviewed felt it was an issue. However, it seems that TB is viewed in the context of a whole person approach, which also recognises poor diet and dietary related illnesses due to food poverty.

My own personal observations were that the rough sleepers (e.g. those in the shopping street in Sanya (near Hoshi-no-ie) appeared to have greater health needs and more problems with alcohol use than people living in the blue tents in the parks. A fact confirmed by the Medicine san Front (MSF) mobile doctor who also suggested those sleeping rough near the train station had more severe health needs than the park people. All the homeless people I spoke to had few teeth except one man living in the blue tent/car near Osaka rail station, who had obtained false teeth, thanks to the efforts of the welfare patrol. It would seem that different groups of homeless have different health needs.

UK

Poor physical and mental health characterise the UK single homeless population. Nearly 60% of people sleeping rough have mental health problems and rates of drug and alcohol use vary with one study showing 81% of homeless people had alcohol or drug dependency. Rough sleepers have an average life expectancy of 42 years compared with the national average of 74 for men and 79 for women. Mental health issues are probably under-reported and under-diagnosed, especially in the substance misuse population and asylum seeker and refugee communities where post-traumatic stress, anxiety depression and physical disability may be common following war or torture in their home countries.

A user consultation survey of the self-reported health needs of homeless people in the London Borough of Camden conducted in 2002, found 40% had experienced ill health or mental health in the previous 12 months with 29% having drug or alcohol problems and 25% experiencing money or debt problems

⁵ Survey result of Nagoya City, reported in Sasashima Clinic Newsletter, 2-10-2004.

iii) Access to health and welfare services

Japan

In general, the provision of welfare is left to the private sector. In order to be eligible for welfare a person needs to have worked at least 26 days in any two-month period and obtain the insurance stamp (which provides health and employment insurance) from their employer. The majority of ex - day labourers fall outside of the mainstream health and welfare provision. All TB treatment is free under the TB Prevention and Control Law.

In 2002 a Special measures Law was introduced for Supporting Self-reliance in the homeless which spawned a number of resettlement packages including shelters and self-support centres involving access to health, welfare, training and employment opportunities. Health and welfare are usually accessed through the health and welfare departments where case workers (unlicensed social workers) assess entitlement to livelihood protection assistance. In Nishinari ward, 26,000 are estimated to be in receipt of livelihood protection and yet there are only 81 case workers. The lack of human resources impacts on opportunities for advocacy and care planning. A number of outreach initiatives and specialist health and employment projects run by the private sector or NGOs are operational and go some way toward addressing unmet need. The Sasashima clinic in Nagoya for example, offers advocacy and support to those claiming assistance directly at the welfare office. The case worker is then able to link the homeless into other services run by the NPO.

Health care is accessed through the welfare office or specialist health clinic, however for those who don't live near a health facility, they tend to be referred by ambulance. Special health tokens can also be obtained from the welfare office, and sometimes, NPOs, to visit a private doctor for consultation. The lack of a stable address is seen as a major barrier to accessing health care. In many cases, welfare is only accessed following hospitalisation, or by accessing the winter shelters and self support centres. Health care checks, including a chest x-ray, although not TB specific, are offered to all park and street homeless before entering shelters, self-support centres and apartments. In some cases, this is compulsory. Again this all forms part of the resettlement packages rather than a right to health care per se.

Entry points to hostels/support centres then are often conditional upon 'good-health' (i.e. an absence of TB; no physical disability) and 'good behaviour' in terms of a willingness to comply with the conditions of the resettlement programmes on offer. The Johoku labour and welfare centre in Tokyo offers health care, access to welfare, a job centre, food and clothing. Service users are issued with a swipe card, which audits their use of services, food and clothing rations etc. Some shelters impose rules about how many meals can be cooked on the premises

and sleeping arrangements often lack privacy (e.g. between 2 –12 sharing a room in bunk-beds or futons on tatami mats, depending on the facility). The resettlement projects are therefore more regimented and contrast with the 'no-questions' asked approach of some NPOs (e.g. Hoishi-no-ie which distributes food). A major difference between Osaka and Tokyo is that that in Tokyo, homeless people have to present to the welfare office to access the self-support centres. In Osaka the welfare patrol targets the homeless through outreach. In theory there should be better access to health and other services.

A common theme in interviews across all three cities was the lack of hospital facilities for homeless people, an unwillingness of hospitals to accept homeless people and concerns that hospital staff have a negative attitude toward homeless people. In Osaka for example, there are only 5 hospitals that accept homeless people and they usually accept between 2-3 people at any one time. Problems of early self-discharge, particularly in relation to TB, were reported. Some hospitals were said to keep 'black lists' whereby patients with a history of self- discharge were refused entry. Because of the risk of early self-discharge, hospitals are reluctant to admit the homeless, as this has financial implications, unless there is a guarantor. In such cases, NPOs (e.g. welfare patrol in Osaka) step in to act as a guarantor. The Local Authority in Nagoya owns an ambulance and has an arrangement with the ambulance staff to notify the PHC of patients with a history of TB and self-discharge from the hospital.

In interviews with officials and NPO's in both Nagoya and Tokyo there was a suggestion that there were inconsistencies in the way the livelihood protection law was applied. Entitlement to welfare varied depending on the Local Authority and individual case workers making the assessments. In theory then, although there is a safety net of welfare provision for the most vulnerable under the Livelihood Protection Law, there are a number of institutional and attitudinal barriers to accessing services. As one MSF worker stated, welfare is easy to claim in law (i.e. on paper), the reality however is different. Further, hospital treatment can be denied on the grounds a person lacks motivation or is at high risk of default with implications for the treatment of TB and, public health.

Specialist health care centres for the homeless in UK

In the UK there are specialist health centres, which cater specifically for homeless people, which fall directly under the National Health Service (e.g. Primary Care for Homeless People-PCHP, and Gt Chapel St Medical Centre). PCHP offers outreach clinics in homeless hostels and day centres. A number of voluntary organisations offer basic health care advice, and health promotion. St Pancras Refugee Centre, a voluntary organisation, supports patients with TB in Camden and Islington and works directly with the TB services in addition to its advocacy work as a result of partnership working with the TB Link.

Specialist facilities in Japan

a) Social medical centre - Kamagasaki

In Osaka city, health care can be accessed through the social medical centre in the Kamagasaki area. This is a 'semi-NGO' (funded by the government and the private sector) and was originally established to target occupational health diseases. It was founded by the labour unions at the port and served the labourers unloading cargo. Although workers are expected to pay for their health care, it is 'free by default' according to Dr Watanabe as the labourers can receive treatment and pay later when they find work. However, for those homeless outside the area it's much harder to access health care and there are only a small number of hospitals offering free or low cost health care that will accept homeless people.

b) Mobile Clinic MSF (Osaka)

This is an outreach mobile clinic staffed by a doctor, nurse and social worker, which has been operating for 3 months in various parks (Osaka castle park, Momogaike and Sakuranomiya) in Osaka offering open access clinics. However, it wasn't originally intended as an outreach clinic. The idea of the mobile clinic came about as a result of opposition to the establishment of a fixed clinic by local residents at the MSF headquarters. Although a direct access clinic in the parks is an example of taking health care to hard-to- reach groups, MSF felt this was only a temporary measure until suitable premises could be found and was not sustainable in the long term.

c) Airin pilot project (Osaka)

Drop-in health centre (unlicensed) has a doctor and a nurse. Also provides work for 250 people per day. With 3,100 people registered, employment is provided 3 times per month.

d) Sasashima clinic (Nagoya)

Offers free health consultation and clinic in the park.

e) Johoku labour and welfare centre (Tokyo)

This is a Tokyo Metropolitan Government rather than local government initiative and offers health care, amongst other support services, to those not in receipt of LPA.

f) Cosmos (Tokyo)

This has been in operation since 1998 and has 26 nurses although only 10 are full time. Administers outreach service with health checks and TB screening (sputum collection). Some limited and informal collaborations with Johoku centre (e.g. information sharing, monthly in reach health consultation clinic). Outreach in Shinjuku and Sumida. Outreach into some of the hostels operated by Furusato and staff screening.

iv) Management of TB patients

a) Hospitalisation

Under the Japanese TB Control and Prevention Law, all patients who have sputum-smear positive TB are hospitalised until their sputum converts. However, in practice patients are often kept in hospital for the whole period of treatment (i.e. 6 months), although in some hospitals (e.g. the Toneyama National Hospital in Osaka) the average hospitalisation period is 3 months. In Taito-kuin Tokyo, a local arrangement exists with the welfare office whereby all homeless people are hospitalised regardless of whether they are smear positive or negative. Homeless people can stay as long as they want, but if considered at risk of default, are likely to stay for 6-9 months. If adherent, they stay for 2-3 months and are placed on a community DOTS programme. Nurses use the criteria of alcohol use, mobility difficulties and learning difficulties as risk factors for non-adherence.

In Nagoya, hospitalisation criteria are applied more strictly and those who are smear negative are not hospitalised.

Interestingly, in interviews with patients in Tokyo and public health staff in Tokyo and Osaka, there appeared to be some flexibility around hospitalisation, which was negotiated, rather than assumed. More flexible approaches such as daily DOT, or arranging accommodation in an apartment were mentioned. If hospitals are generally reluctant to accept patients perceived as 'difficult-to-treat', a perception reinforced by a tendency of patients to self-discharge before treatment completion, more innovative, community-based approaches to treating TB will be necessary.

In the UK shorter periods of hospitalisation are generally favoured and patients are discharged once their sputum has converted (10-14 days). Longer periods of hospitalisation only usually occur for social reasons, i.e. a person may be hospitalised until suitable accommodation is found or if they are considered particularly vulnerable. Not only are lengthy periods of hospitalisation costly (e.g. £500 per day on an infectious disease ward), but rarely acceptable to patients who often find hospital regimes difficult to cope with. Further, there is a risk that a patient may lose their hostel accommodation so every attempt is made to 'normalise' people's lives and continue their treatment as an outpatient in the community.

b) DOT

In the Japanese context, most patients receive 'hospital DOTS' either as an in or outpatient. The Toneyama hospital holds monthly, multi-disciplinary case conferences involving public health centre nurses, hospital doctors and more recently, a social worker, to discuss patients thought to be at risk of 'default' following discharge. Patients are identified according to a number of risk factors thought to be associated with non-adherence to treatment. This system

may account for the shorter periods of hospitalisation. The hospital reports treatment completion rates of 90%. However, the catchment area of the hospital includes higher social classes and the practice of not admitting those patients regarded as 'difficult-to-treat' may also contribute to the high rates.

Whereas in London, treatment completion rates in North Central Sector for 6 hospitals in 2002 for example ranged from 77.5%-90.9%. North Central Sector has the most complex case presentation in London (personal communication, Alistair Story quoting from the London Nurses Profiling Study, 2003). DOTs in the UK setting is usually provided 3-5 times per week either by the TB nurses, the Drug dependency unit, which will administer TB medication along with a methadone programme for drug users, or other schemes such as the proposed community pharmacist scheme. There is also a DOT outreach worker based at UCLH. Many patients placed on DOT are also given a small financial incentive for taking their treatment, which appears to work well.

In Japan, the definition and practice of DOT appears to vary. For example, one nurse mentioned that a patient was on 'fortnightly' DOT. This has led to the term 'Airin DOTs' in Osaka, which is administered 5 times per week to distinguish from the more ad-hoc DOT arrangements. A number of different organisations were identified in administering DOT. In Osaka, there was a project designed to train ex-homeless people to work as an outreach DOT worker in the community (personal communication, Mr Nishimori). In the Sanya area in Tokyo, DOT was provided by Cosmos NPO and the outreach worker at the Johuku centre, although in the case of the latter, the caseload was only two patients. The reasons given for the small caseload were that other patients came to the clinic directly to receive DOT by the nurse, and most were treated for TB in hospital. No incentives appear to be used in Japan⁶ apart from a nutrition drink in some cases or, as one nurse suggested, the opportunity to talk with a 'female' nurse provided enough of an incentive!

In the UK there is a move towards establishing protocols for DOT but generally, the culture of TB nursing is resistant to DOT. This resistance partly relates to resourcing issues, but also to concerns that DOT (a practice sometimes considered authoritarian and disempowering) may compromise the nurse-patient relationship. The London profile study for example illustrated that between 17%-23% of patients should be on DOT if the criteria recommended by the British Thoracic Society were followed. In practice, as few as 2.2% of patients are started on DOT and relatively few patients (only16%) are ever treated by DOT (Story, et al, 2004;BTS Winter Meeting).

⁶ Mr Sato at the Johoku centre thought that incentives were used at Ikebukuro but did not have further details.

Mobile screening appears to be an integrated aspect of public health control with some PHCs operating screening up to 6 times a year (e.g. Taito ku). Arakawa PHC attributed the drop in smear positive pulmonary TB to more effective screening programmes resulting in reduced delays in presentation. In Airin in Osaka, 150 are screened per month with 2,000 out of 30,000 screened so far. In one of the 7-day winter shelters, 21/1,200 were found to have TB (personal communication, Dr Shimouchi). However, one NPO suggested the screening programmes were poorly organised and didn't target those most in need through outreach. In the UK, currently, there is no mobile screening. The Department of Health has recently funded a mobile for London as part of a pilot, ad-hoc project. It will be operational by March 2005.

The following barriers to screening for TB were identified:

- Low take-up-: Not a priority It's not a priority for the homeless where hunger is the main issue
- Low take-up: Embarrassment about having to undress dirty clothing, dirty bodies (despite the availability of washing facilities and clean T-shirts-the homeless were seen as too 'proud' to accept these offers (personal communication Mr Sato, Johoku Centre).
- Cost: Some construction companies require workers to pay for the x-ray although under the new TB law the cost will be sponsored by Local Government.
- Uneven coverage:

Winter shelters (can miss those who have secured work that day or those who are staying at the construction site);

Construction sites (can miss part-time and night shift workers);

Targeting: There was a feeling that the mobiles don't go to the 'hot spots' and are not targeted where most needed (although Nagoya City were reported to have screened the homeless in the park in 1986 after lobbying from an NPO).

• Lack of joint working with NPO's.

v) Awareness of TB in the homeless

In conversation with the homeless, there appeared to be a lack of awareness of TB although when pressed further, many were able to identify symptoms of TB.

It is possible that awareness of TB may be age-related; the older homeless may be more aware because of the greater prevalence of TB as a child. TB spread to the rural areas in during the early 20th century before becoming concentrated in urban areas in Japan. The Welfare patrol office in Osaka felt that the homeless population had a good awareness of TB and specifically wanted health checks to include TB. They also felt the new homeless had more contact with the patrol and were more able to access health care than other groups. This was confirmed by the MSF doctor who reported that the park people did consult about their health. One nurse interviewed in Nagoya felt there was poor TB awareness amongst the homeless. The Osaka Human Rights Association reported that TB generally was not a topic raised by the homeless.

This would suggest varying levels of awareness of TB amongst different groups of homeless and different patterns of health seeking behaviour.

A greater awareness of TB amongst hostel staff in Arakawa in Tokyo (aged 40-50) was reported due to contact with public health centres, more direct experience of managing patients with TB and annual screening of hostel residents since 2002 (Arakawa City Welfare).

vi) Joint working

Articles 12, 13 and 14 of the Japanese Daily Life Protection law calls for better liaison and joint working between national and local government and private organisations to support initiatives that promote independent living in homeless populations. However, in general, NPOs are in a subordinate relation to Governments and often depend on them for funding, both of which can compromise the independence of NPOs.

In Nagoya, although joint working was mentioned in the Action plan this work was underdeveloped. Development of joint working with NPOs was seen as a function of the NPOs themselves rather than the Local Authority taking the lead. The relationship between the public health centre and Sasashima clinic was described as 'not strong', the main area of cooperation is with the livelihood protection assistance, where the caseworker (Mr Fuji) offers advice and advocacy in the welfare office. The clinic also offers training for health workers in alcohol use.

There was some evidence of joint working between the public health centre in Osaka city and alcohol agencies but this was described as ad-hoc rather than routine. PHCs seemed to work with NPO's when trying to find patients lost to follow-up. There was also evidence of informal collaborations between the welfare patrol office and MSF in Osaka and the welfare patrol and the Osaka human rights group. This group has placed homelessness on its agenda. It is also a literacy project that has carried out some consultation work with homeless groups. The relationship with the patrol was described as 'informal', involving the sharing of outreach work (night cover), food distribution and joint study days. As the Human Rights group is not an NPO (although it receives some funding from government) it has more freedom in how it operates.

In Tokyo, there was joint working between Cosmos and Furusato-no-kai NPOs with the former offering health checks. In Arakawa the hostels (NPOs) co-operate in relation to TB screening.

The Johuku centre is a Tokyo Metropolitan Government Initiative but in order to deal with the homeless problem there is a need for collaboration at Ku level. The sharing of responsibility and budgets were contentious issues. Further, Sanya bridges the cities of Taito and Arakawa. Cross city working was not particularly well developed. Although there was communication

amongst different cities through monthly meetings, there appeared to be little joint working around medical provision.

Some officials in Tokyo expressed an unease about working with 'NPOs' as they were regarded as having a history of political activism. Public Health Nurses generally did not work closely with NPOs, either because of a lack of knowledge of the different services offered, or an anxiety about public bodies showing favouritism—'if you work with one you have to work with them all' (public health official, Taito ward). Concerns about accountability, and who would be responsible for resolving any conflicts over roles and responsibilities were also raised. One interviewee stated it was the council policy not to collaborate with NPOs. Similarly, there was some concern that NPOs were being evaluated by Local Authorities in relation to the objectives of the resettlement programmes rather than the process and quality of care provided.

The lack of capacity of some NPOs was also raised as a barrier to joint working. The Sasashima clinic in Nagoya for example, has only one full time member of staff and approximately 20 volunteers, but very few of these are able to work on a regular or long-term basis.

Despite some reservations, most public health nurses and officials felt there was a need for greater joint working with NPOs in supporting homeless people and TB treatment because NPOs work closer to the client group and are less bureaucratic.

vii) Conclusion and recommendations

There would appear to be a strong association between homelessness, age, poverty and TB. Studies in the UK have shown a similar association between poverty, housing and TB (Bhatti et al.). Although homeless populations in Japan appear less diverse than the UK, there is diversity in terms of health and mental and physical disability. A systematic needs assessment of homeless populations is warranted in order to reflect the diversity of health and social needs. Further, different groups within the homeless may have differential access to health care depending on the availability of outreach services. However, if service delivery is driven by a political agenda to remove homeless people from public places rather than need, there is a danger that these vary policies may inadvertently exacerbate health inequalities. Different groups of homeless may also exhibit different health seeking behaviours.

It is clear that TB control cannot be discussed in isolation of the barriers to access to health, housing, and welfare discussed in this report. The challenge for Government and NPOs is how they can address the issue of equity and access to services to some of the most marginalised sectors of the community. It is unlikely that there is a 'one-size fits all' solution to TB control, but measures that reduce poverty, increase access to housing, welfare, training and

employment opportunities are necessary to prevent a person returning to the same environment that predisposed them to TB in the first place. Measures to control public health need to be implemented alongside projects involved in urban regeneration and community development to address poverty, and ultimately TB. This will involve greater public and private partnerships.

General

- More flexible approaches in relation to TB treatment are needed including a change of focus from hospital to community-based treatments with greater ambulatory care and DOT/support packages. Shorter periods of hospitalisation backed up by community DOT projects involving NPOs may be one way forward. Explore peer education and support initiatives employing ex-homeless people to conduct outreach, training and DOT.
- Better needs assessments to uncover mental health/alcohol problems and identify tailor-made support packages including appropriate housing placements. The UK model of supported housing with or 'floating'/outreach support for those able to achieve independent living in apartments may be one model (see coalition of supported housing in Osaka, and Furusato for example).
- Combat stigma and discrimination around homelessness and TB through training and education. Explore the potential of NPOs in countering stigma through education such as those seminars run by Dr Watanabe at the Matsura Clinic. The Oyodo support centre also has a long history of integrating homeless support projects into the community through 'tamura-san' involving an open access café and meals for local residents.
- Employment partnerships with public bodies and NPOs to train and employ ex-homeless people, particularly in service industries designed to support the homeless. Examples of this were found informally at Cosmos and more specifically at Furusatonokai, where the ex-homeless are trained as carers or home helps and receive a licence.
- A mapping and evaluation of community projects, NPOs involved in TB, health and homelessness. Particular attention should be paid to how these initiatives are funded and whether they are sustainable in the long term. More community involvement in the identification of appropriate outcome measures for the evaluation of these and other homeless support initiatives are recommended.
- Incentivise NPO's to have greater involvement in TB care and management in the community. For example, is there a role for outreach organisations to provide DOT? What would be the barriers?
- TB awareness training for all NPO staff and hostels.

Outreach

• Outreach models of health and health screening such as that those offered by MSF, the Sasashima Clinic which offer a 'no-strings' attached model of health care.

• Explore the contribution of NPOs in outreach initiatives such as the Osaka Human Rights Association.

Mobile screening

- Strategies to provide better coverage involving more effective liaison and coordination between shelters, NPOs, hostels and construction companies.
- Involve NPO' that work more closely with homeless groups in mobile screening. Contract out some of the screening
- Greater partnership working with PHCs, NPO's, construction companies and owners of flop-houses in relation to TB detection and support programmes.
- Consider the use of incentives to increase the take-up of screening (eg.food incentives).

Hospital care

- Lobby hospitals to accept patients. Explore options for incentivising hospitals to accept homeless TB patients and not to close TB beds (personal communication Mr Takatorige). Involve medical associations and NPOs in the lobbying.
- Research on early-self discharge from hospitals is recommended. Is there evidence that early intervention by public health nurse or equivalent, e.g. peer/NPO supporter decreases the rate of default/early discharge. Would hospitals be more likely to accept homeless patients if there were NPO involvement supporting patients on the ward (see Osaka model, or support worker model based on that provided by Ms Irisa-san).
- Implement training packages for hospital staff to 'de-stigmatise' homelessness and TB. Identify opportunities to include homelessness in the educational curriculum and continuing professional development. Involve NPOs and 'homeless' instructors in training.
- Conduct a feasibility study on an intermediate care bed facility in the community, with multi-disciplinary health and social care inputs to resettle people back into the community following discharge. A number of models are identified in the literature, see for example, The Harlem model in US; the Amsterdam model in the Netherlands

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Nakamura Welfare Office

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Cosmos

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Mr Nishimori (Primary Health Care, Osaka)

Ms Akemi Irisa

Visit Report and Recommendations to Research Project on Tuberculosis Control in Urban Areas in Japan (with special focus on Osaka and Tokyo)

Paula I. Fujiwara, MD, MPH Deputy Executive Director, IUATLD

Purpose of the visit:

The purposes of the visit were:

- 1. to re-visit Osaka and Tokyo, to meet with, and give technical advice to officials responsible for, and to researchers with an interest in tuberculosis in urban areas in Japan.
- 2. to review the progress to date of tuberculosis control program activities in Osaka and Tokyo, with a special emphasis on the homeless population.

< Osaka City >

Background:

During the late 1990s, the Osaka City government recognized that tuberculosis was one of its major public health problems, especially among the homeless. In 1990, the government, led by Dr. Seki, the then vice-mayor, appointed a coordinator with the authority to address the tuberculosis problem in the city. Although government medical staff based in 24 ward public health and welfare offices, as well as in public hospitals, work in a decentralized manner, central government office officials have the ability to rotate staff to different positions as needed. In the past several years, tuberculosis control activities have been strengthened by the appointment of nursing staff from each of the ward public health and welfare offices to the central office, where they are able to perform tuberculosis surveillance, supervision and contact investigations city-wide, rather than being limited to a particular ward. The homeless population contributed 17% of the tuberculosis morbidity in Osaka City in 2003.

Progress to date:

- 1. Between 1998 and 2003, the incidence rate of all forms of tuberculosis has declined from 104/100,000 to 68/100,000 population. Given the current rate of decline, the program will probably meet its 10-year objective to reduce its rate to less than 50/100,000 earlier than predicted.
- 2. The standard tuberculosis program outcome indicators have improved.