Design With People in Mind
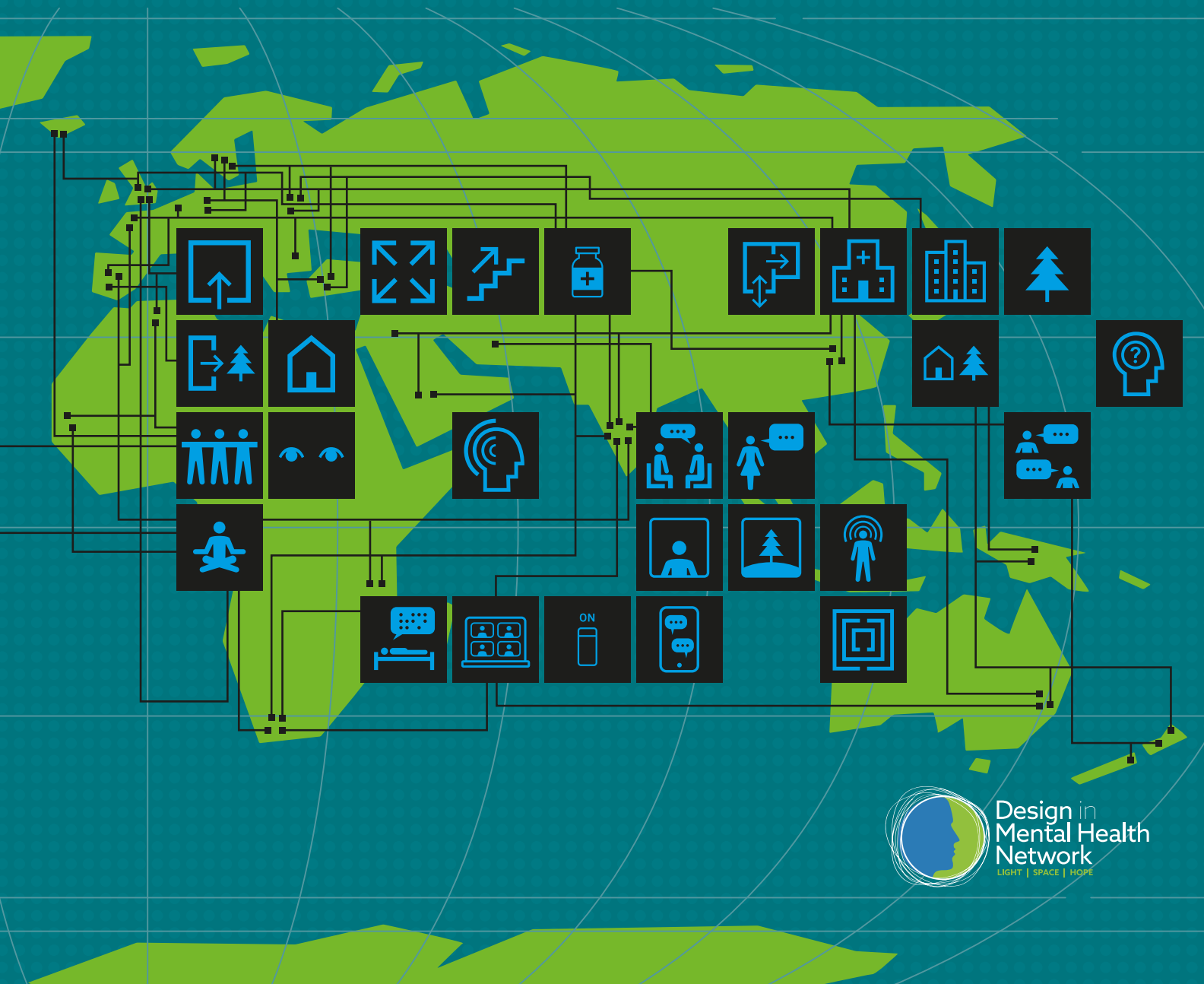
The International Issue

Design in
Mental Health
Network

LIGHT | SPACE | HOPE

Welcome to the Research and Education Workstream of the Design in Mental Health Network. We are committed to the development of an evidence based resource, to inform decision making and improve experiences within mental health services

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International perspectives on design with people in mind

This is the seventh in the Design with People in Mind booklet series. Throughout the series we have been keen to identify and promote research and evidence that can inform a service-user centred approach to designing mental health-care environments. Whilst we have always discussed the best examples of practice from around the world, inevitably a large amount of that work has come from the UK and Western Europe. For this publication, we stretch beyond familiar boundaries to explore international perspectives to gain a better sense of how mental health care design has developed and is practiced across the globe. Through comparing perspectives, we show areas of common ground and consensus, along with others where there are very different histories and varied directions taken for the future.

To gain a sense of the evidence across a wide range of countries, we conducted a procedure known as a Rapid Evidence Assessment (REA). This is an increasingly well-established technique for collecting, sorting and evaluating published evidence. Unlike Systematic Reviews, which tend to focus only on a limited range of 'gold-standard' evidence such as Randomised Controlled Trials, we wanted to look for a broad range of evidence, in the knowledge that post-occupancy evaluation is often very difficult and can be uneven in mental healthcare, due in part to limited resources. We also wanted to recognise work from service-user, professional and practitioner literatures that provides important and powerful insights. The results of this REA will be available in the member's section of the Design in Mental Health Network, UK website (**https://dimhn.org/resources/**) in the near future.

In this publication we give snapshots of what is happening across a range of countries around the world. In countries like Sweden, for example, there is a long tradition of person-centred design which has given rise to some fascinating new hospital projects. By contrast, China has only relatively recently engaged on an ambitious programme of hospital building after shifting from a long tradition of community-based care. In Brazil, a different direction of travel is taken, with the use of innovative psychosocial community centres (CAPS) aiming for social inclusion. Things are different again in South Africa, where the history of addressing HIV as a public health priority offers important lessons for rethinking integrated community mental health care.

We have organised the publication around four overall themes, reflecting globally shared issues. All inpatient mental health care needs to balance the demands for safety with those of patient autonomy, particularly around the longstanding issue of open and locked wards. Healing or therapeutic architectural practices can be found in a great many countries and there is now a wide range of evidence for what the key aspects are of space that may be make people feel good, including elements of biophilic design. Recovery and patient focussed approaches are also broadly acknowledged globally, although they vary considerably in terms of their scope and implementation. Finally, we look to the future of mental healthcare design to ask whether the future will be a system where hospitals remain at the centre of mental health care, or whether more integrated community therapeutic landscapes can be realised.

In making international comparisons, we have inevitably revisited some topics covered in previous publications, such as The Nature and Borders & Boundaries issues. However, for this publication we have deliberately chosen not to discuss work conducted in the UK, to shift the focus beyond national boundaries. Each section also includes a short case study – drawn from Finland, South Africa, China and Japan – intended to capture a flavour of the different ways of thinking and practice found internationally. This booklet is also a collaborative effort between the International and the Research and Education workstreams of DIMHN.

In line with the overall philosophy of both the booklet series and DIMHN, we place particular emphasis on the centrality of service-users and the ways in which their needs are critical to good design practices. We hope that this introduction to international perspectives may help to spur thinking about differences and similarities in design approaches. Our vision, as always, is for this evidence to be put to good and to benefit those who live and work in mental health care environments, both in services and in the wider community.

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1. The use of locked wards and restrictive practices

Safety is a universal concern shared across all inpatient mental health facilities globally. And yet, there are debates in many countries about the most effective ways of designing safety into the built environment, specifically regarding the use of locked wards and restrictive practices.

In **Sweden**, research with mental health nurses revealed a balanced view regarding the advantages and disadvantages of locked wards (Haglund et al., 2006). Whilst control, protection from the outside and security were valued, it was acknowledged by staff that patients could feel uncared for, confined, powerless and experience a loss of self-identity. Johansson et al. (2007) found there were split opinions between staff members who felt that locked environments could enable caring and supportive relationships between staff, patients and next of kin, and those who felt that it promoted intrusive and uncaring relationships.

Restrictive practices and seclusion pose a further challenge in terms of balancing safety with dignity. The ethical challenges around the use of seclusion have been highlighted by the **Norwegian** Acute Psychiatry Network who have pointed specifically to the psychosocial stress experienced by ward staff involved in the practice (Haugom et al., 2019). In **Finland**, research has shown a 13% overall reduction in the use restrictive practices for violence reduction compared with international rates (Asikainen et al., 2020). De-escalation techniques that emphasise the vital role of the environment in reducing aggressive behaviour and hence the need for restrictive practices, such as *Safewards* (Bowers et al., 2015) and Six Core Strategies (Huckshorn, 2004) have been adopted

across the world, but more work needs to be done to improve a range of identified environmental factors (e.g., availability of relaxation and sensory rooms). Laukkanen et al. (2019) have also pointed out the need to change cultural factors such as the attitudes of nursing staff around the use of coercion alongside environmental improvements.

The *Safewards* programme has also been adopted in **Australia** where there is a widespread view that surveillance measures can be a precursor to violent behaviour (Due et al., 2012) and that in general locked wards lower self-esteem, lead to higher refusal of medication and result in patients feeling excluded (Gill et al., 2021). Australian inpatient psychiatric units tend to feature close-observation locked areas within open wards to reduce patient aggression, following evidence-based design practices (Ulrich et al., 2018). However, highly skilled staff are required to effectively manage these spaces (O'Brien & Cole, 2003). Australian researchers have provided evidence that access to gardens and recreational facilities and private, uncrowded, calm spaces can reduce the use of restrictive practices, calling for more co-design approaches guided by lived experience expertise (Oostermeijer et al., 2021).

Research in the **Netherlands** (Nugteren et al., 2016), has highlighted how closed psychiatric wards can produce a range of negative psychological effects on patients. These include feelings of humiliation, little or no opportunities for contact with nursing staff and a perception that ward rules were being prioritised over provision of care by nurses and other ward staff. Analysis of data from across near 100 psychiatric units across The Netherlands identified 14 ward characteristics and

design features that were associated with the risk of seclusion including the presence of outdoor space and privacy (van der Schaaf et al., 2013). One of the most interesting findings was that the presence of fixtures primarily designed for their safety features – 'special safety measures' including visible door locking features and warning systems – actually increased the risk of seclusion.

In a study in **Israel**, patients in closed wards entered a seclusion room whenever they showed agitation, overwhelming stress or physical and verbal aggression. When relaxing music chosen by patients was played in the room, it had a positive effect on their emotional state and reduced agitation and aggression. Music may then offer an immediate opportunity to intervene before patients become aggressive and restraint is used (Bensimon et al., 2018).

Summary

In those countries where locked wards are used, there tends to be contrasting views around their efficacy in relation to safety. However, there appears to be something of a consensus that closed wards have significant psychological implications for both patients and staff. Architects and designers may suggest alternative options to seclusion on wards through music and designing for observation.

2. Opening up spaces and feeling safe

There has been a great deal of interest in exploring the use of open inpatient spaces across a number of countries. In **Germany**, an open-door policy was trialled in a large specialist psychiatric hospital in Cologne with the aim of reducing conflict and aggression amongst patients (Gouzoulis-Mayfrank et al., 2019). After two years, it was found that other interventions such as providing access to gardens and outside space, reducing crowding and the use of de-escalation rooms were judged by staff to be more effective than opening up doors by themselves. By contrast, in **Switzerland**, a two-year longitudinal study of a psychiatric unit in Basel found a significant decrease in the use of seclusion and restrictive

practices through implementing an open ward treatment policy (Jungfer, 2014). The researchers directly compared open and closed wards in the same unit during the study.

Researchers in **Norway** have considered the psychological safety of patients and staff in psychiatric care. Berg et al.'s (2017) study of suicidal patients found that for patients to 'feel safe' they need a sense of connection with healthcare professionals in a way which confirms their feelings as a human being and a sense of protection within the environment. Receiving support from observers and experiencing some degree of control through gaining

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insight into their condition and means of coping with current difficulties was considered vital. The researchers argue that psychological safety is more important than the technical safety designed into the ward environment and the two aspects of safety need to be approached adopting a holistic approach to in-patient psychiatric care.

The question of what makes patients feel safe within inpatient settings has also been explored in **Australia**. Cutler et al. (2021) suggests that feeling safe depends upon the extent to which patients feel that their personhood is validated. This involves three separate factors: being treated as a person with equal values, being respected as an individual and being able to make choices. The research indicates that current design practices in Australian inpatient units tend to undermine all of these factors, because of the lack of freedom of movement for patients, such as the inability to make choices about daily routines (such as making a cup of tea) and the lack of social spaces.

Explanatory models are suggested by authors in **Canada** interested in the factors related to violence and crowding on acute inpatient psychiatric wards (Kumar & Ng, 2001). They argue that feelings of being crowded are related to a subjective sense of an inability to protect interpersonal space rather than an objective measure of spatial density. This subjective perception may vary by culture – for instance, through cultural preferences around personal space or traditions around living conditions (Cromby et al., 2013). The research proposes that subjective estimates of 'body buffer zones' should be taken into account to design 'non-crowding' environments along with the regular use of activities organized outside ward space.

In **Sweden** there have been calls to move towards an integrated model of ward practices around safety and the technical designing in of safety within ward environments. Stefan Lundin, who led the design of the large Sahlgrenska University Hospital in Östra, calls this integrated model 'the healing and safety complex'. This model uses three fundamental principles – 'good care and a high degree of safety should walk hand in hand', 'safety must not compromise the healing environment' and 'safety must be there but hidden and not provocative' (Lundin, 2021: 107). In practice at Sahlgrenska, this included thinking through design issues such as optimum placement of patients' beds in their bedrooms, using visually appealing fixtures and fittings over obtrusive safety features, compromising sightlines for social interaction around nurses' stations and modelling outdoor areas as small 'terrace gardens'.

Summary

Whether a ward is open or closed is not always relevant if patients overall feel safe and have the opportunity for private spaces. Designers need to develop holistic models which include psychological safety alongside technical safety when considering psychiatric inpatient environments. A high degree of psychological safety appears to be related to feelings that the care received is of a high quality.

Case Study
Finland

All environments involve a degree of risk. Since it is never possible to remove risk entirely, the design of psychiatric inpatient environments needs instead to understand how risk and safety can be balanced against patient perceptions of respect, autonomy and receiving good care. In Finland researchers at the Kupittaa psychiatric hospital in Turku have developed the idea of 'carceral riskscapes' as a way of thinking about this relationship between safety and patient perceptions. They define riskscapes as 'spaces embedded with risk and usually referred to in connection with health or environmental hazards' (Repo, 2020: 121) such as those typically found in secure ward settings.

In their analysis of the unit, the researchers showed how more secure practices were developed as staff and patients perceived an increase in risk. But this perception of risk led to an actual upwards increase in both security and risk. The problem seems to have been that social and gender inequalities amongst staff created a 'distorted working culture favouring rough handling and disparagement of the patients, whereby the staff members became divided because of these practices' (Repo, 2020: 130). In this case staff working conditions, specifically relating to staff social inequalities, were the crucial link between safety and patient perceptions. This demonstrates the need for a holistic model of a ward environment as a riskscape that includes patient living conditions, staff working conditions and the built environment.

Healing, Health & Therapeutic Architecture

1. Designing to make people feel good

Across the world, architects have been creating state of the art hospital environments in the 21st century. As researchers in **Greece** put it, the challenge is creating environments that are equally "safe, healing and alleviate stress" (Fani and Artemis, 2010). The healing aspects of space are those that make people feel good and are experienced as comforting and soothing.

Turkey has gone through huge periods of change around mental health care since the 1980s and has actively attempted to deinstitutionalise hospitals (Bilir & Artvinli, 2021). One aspect of this has been the use of sustainable and local materials in acute mental hospital therapy rooms to create a more comforting and homelike environment (Onaran, 2009).

In **Finland** research has identified a range of key design elements in hospital environments which support well-being for both patients and staff, including "the acoustic environment, ventilation and air conditioning systems, the thermal environment, the visual environment (e.g., lighting, and views of nature), ergonomic conditions and furniture" (Salonen et al., 2013). However, the use of decentralised rather than centralised nursing stations benefits patients rather than staff, who tend to feel isolated from their colleagues.

Similarly, having dedicated areas where family/visitors and patients can be together is highly beneficial for patients because of the increased support they experience, but makes it more difficult for staff to maintain observations. Perhaps most surprisingly, the research found that the use of carpets as floor coverings made the ward feel more homely for patients, but were disliked by staff because they made it more difficult to push hospital carts and wheelchairs down hallways, increasing the risk of musculo-skeletal problems.

There has been an active push for more community-based approach to mental health care in **The Netherlands** for some time (Ter Stege & Van Hengten, 1986). In a systematic review of over 30 studies of healthcare environments, Dijkstra et al. (2006) identified "sunlight, windows, odour, and seating arrangements" as having positive benefits on patient well-being. Other interesting aspects identified by the research were the positive effects of natural sounds and views of nature, resulting in shorter hospital stays.

The **USA** have a national patient safety focus which involves enhancing the sensory elements of ward space as well as reducing the use of seclusion and restraint (Cummings et al., 2010). Comfort rooms consisting of "comfortable furniture, soothing colors, soft lighting, quiet music, and other sensory aids" have been shown to significantly reduce the use of restraint and seclusion and lower patient distress.

However, Zborowsky and Kreiter (2008) point to some disagreements around the use of sensory elements and suggest, to the contrary, that aesthetics in hospital wards do not have a significant role in reducing stress and promote healing. This split may reflect the regional differences and complexity within the US healthcare system. Interestingly, other regional authors in **Ecuador/Canada** have also suggested that there is inconclusive evidence on the extent to which the aesthetic aspects of the built environment impact upon

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mental health and psychological well-being, following their review of systematic reviews in the area (Núñez-González et al., 2020).

Sensory based strategies have been shown to have a positive reduction in patient distress and in the use of seclusion in **Australia**. However, cultural change is as important as environmental change when using new methods such as sensory rooms in mental health inpatient care (Chalmers et al., 2012). Interviews with staff and patients by Smith and Jones (2014) found that a sensory room on a psychiatric intensive care unit (PICU) can improve communication and the overall experience, but does not reduce seclusion rates.

Stichler (2008) stresses how views of nature, natural light, soothing colours, therapeutic sounds and the ability for patients to interact with family members as being among the core elements of an Australian approach to 'healing environ-ments', emphasising the need for nurse leaders to use evidence-based design in applying this philosophy of care.

Ma et al. (2021) in **China** highlight that a good nurse patient relationship, patient autonomy and a quiet, safe home-based physical environment are all important aspects for using

sensory-based approaches in psychiatric care, at home and in the community. The Chinese mental health care system has seen significant clinical expansion over the past decade, and it has been argued by researchers in this region that 'sensory-based approaches in a multicultural environment and home environment will be important topics of psychiatric care in the future' (Zhou & Sun, 2010).

Summary

There appears to be agreement on the benefits of sensory approaches in mental health care when the overall culture of care changes too, with most of the research in this area coming from the UK, USA and Australia. Not only are multisensory approaches important from a patient care perspective but we can also appreciate the importance of the human senses in architectural design and environments, especially in relation to nature.

2. Biophilic architectural design and green spaces

The term 'biophilia' was originally used by the **USA** based psy-choanalyst Erich Fromm (1964) to denote the deep connection between humans and nature. It was further popularised in North America by E.O. Wilson's (1984) biophilia hypothesis (BET) proposing how humans are driven by the need to seeks out affiliations with the rest of the natural world.

In design terms, biophilia has been associated with a more organic approach to architecture. Dias (2015) based in **Portugal** treats biophilia as part of a sustainable approach to design; connected with other 'green approaches' such as regenerative design. Biophilic architecture in **India** seeks to build the gap between humans and nature in ways that can improve cognitive function, reduce stress and support mental health (Asim et al. 2019). There has been an increased

awareness of the importance of nature in cities and archi-tecture or 'Biophilic Cities' found in **Egypt** (Nasreldin & Abdelfattah, 2020), **Singapore** and **Portugal** amongst others (Panagopoulos et al., 2020).

The importance of green spaces on mental health and well-being is also well known in today's urban architecture. For example, in **Japan**, urban design features such as streetparks, the greening of inside public spaces and blue light and nature images in train stations have all been shown to improve public mental health (Roe & McCay, 2021). Studies in the **USA** have shown that when compared on a scale from natural to built up, natural environments positively impact both physiological and psychological factors (Beil and Hanes, 2013). Perceived stress in urban areas was shown to be

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lower in natural areas and notably higher in women when compared to men. However, there is little evidence that greenspace and neighbourhood quality are associated with adolescent mental health and wellbeing according to **Australian** researchers Fleckney and Bentley (2021) via their analysis of 24 studies.

Spending time in green spaces can support both patients during recovery, and staff during their working day. A study in **Taiwan** (Chang & Chien, 2017) highlights that different landscape features are preferred by different groups visiting a regional hospital environment. Patients specifically wanted to get out into nature but all groups suggested a need for sheltered outbuildings for different weather conditions.

Work in **The Netherlands** has shown that light and nature offer considerable benefits to mental health and influence recovery (Meesters et al., 2020), and that bringing nature indoors has more general stress-reducing effects (Dijkstra et al., 2008). Plants in hospital rooms can reduces stress in comparison to rooms without plants due to the perceived attractiveness of the room.

Research in **Australia** has stressed the benefits of green spaces and outdoor spaces within hospital environments (Bernhardt et al., 2021). However, it also concluded that access and awareness to these spaces was not always optimised, leading to some underutilization of the facilities. The researchers call for more participatory and co-design approaches to overcome this tendency. Other research in the country has shown the health enhancing benefits of greenspace on pain (Stanhope et al., 2020).

Garden therapy in outpatient psychiatric care in **Sweden** has positive outcomes, both for the individual but also as a means of generating greater social cohesion (Wästberg et al., 2021). Designers should consider the use of garden space when designing these areas which allow patients to "just be" and/or to socialise.

A new mental rehabilitation centre in **Saudi Arabia** has highlighted the importance of green space for recovery and designed its facilities accordingly (Bakhamis & Fekry, 2020). Furthermore, elements of comfort, privacy and interaction were all highlighted as important factors for healing and a recovery focussed environment.

Summary

Green space in the community and hospital environments can have biological, psychological and social benefits for patients, staff and visitors. There is a now a well-established relationship between biophilia and mental health that can be usefully addressed in the design of psychiatric inpatient designs. There is also some evidence that the digital or virtual recreation of green spaces may also be effective (Yeo et al., 2020).

Case Study
Japan

Mental health in Japanese society is treated with significant social stigma, with mental health conditions regarded as shameful by many (Kasahara-Kiritani et al., 2018). This leads to low levels of self-referral and treatment seeking, with a widespread belief that mental health conditions do not require professional treatment (Desapriya & Nobutada, 2002). This led the Japanese Society of Psychiatry and Neurology to change the Japanese term for schizophrenia from *seishi buntetsu byo* (split-mind disorder) to *togo shiccho sho* (loss of coordination disorder) in a bid to reduce stigma.

During the 19th century, 150 asylums in the USA were originally created within a therapeutic landscape to provide a place of "sanctuary" and "retreat". Although treatment and design practices have moved away from the model of large institutions in the US, Haruki Kazano from the Department of Psychiatry in Tokyo Musashino Hospital, has suggested that the original concepts of these asylums should be revisited in Japan. Kazano (2012) argues that there is a need to return to the idea that the landscape of the property should be comprehensively integrated within the overall therapeutic landscape of the psychiatric hospital environment. In a country which places such value on balance between architecture, design and nature, it may make sense to rethink the idea of the psychiatric hospital in relation to the natural and social environment in which it sits.

Recovery & Patient Focussed

1. Evidence based design and built for 'user' purpose

Key stakeholder engagement is now broadly acknowledged globally to be an essential feature of the design and building of hospitals if patient needs are to be met. Studies across **Western Europe** show that including stakeholders in the design of the built hospital environment has a positive influence on patient mental health, well-being and recovery in the context of independent living, inside and outside of hospital (Weber et al., 2022). However, there is some variability across regions in terms of the level of stakeholder and user engagement.

In the **USA**, for example, managerialism and consumerism tend to exert considerable influence over the design of hospitals (Bromley, 2012). Therefore, the concept of patient-centeredness within design has tended to impact on the look and feel of the hospitals rather than on the day-to-day management. Researchers in the region have called for more patient centred and clinically informed design in psychiatric services to support patient and staff functioning (Karlin & Zeiss, 2006). There is growing movement, which has highlighted the importance of the meaning of spaces for both staff and patients in acute psychiatric care (e.g., Shattel et al., 2015; Southard et al., 2012; Andes & Shattell, 2006). A significant aspect of this is the observation that the provision of a healthy hospital workplace also provides a healthy environment for all users.

In **Canada** there has been some debate about whether newly built hospitals meet expectations around the creation of an 'architecture of wellness' (Alvaro et al., 2016). Researchers compared an existing facility and a new facility within the

same complex in Toronto, alongside a comparison hospital. Perceptions of improvement in mental health, self-efficacy in mobility, satisfaction, and patient-staff relationships were found at the new hospital relative to the former hospital, whereas optimism, depressive symptoms, general well-being, burnout and intention to quit amongst staff did not vary. Patients and staff who held favourable initial impressions of the new building design did better on wellbeing-related measures than those with less favourable impressions. Elsewhere in the country in Hamilton, focus groups and surveys were conducted to explore whether a new inpatient entrance or portal to a newly built mental health facility supported recovery-orientated care (Ahern et al., 2016). Patients and visitors found the main and unit entrances to be positive, safe yet private and not stigmatising. The researchers highlight the need for engaging multiple stakeholders in conducting effective post-occupancy evaluations.

Process mapping has been used to inform the design of **Australian** mental health acute inpatient facilities (Arya, 2011). Mapping out the processes of how the facility is actually used can help inform the design of new hospital environments. Researchers in the country have improving evidence-based design by involving mental health service users via virtual reality, in the final building design (Liddicoat, 2019).

Sweden is one of world-leaders in the practice of design-driven dialogue between stakeholders to improve healthcare architecture (Lundin, 2021). Data collected from staff who relocated from three Swedish forensic psychiatric hospitals into new facilities showed an increase in job satisfaction,

as well as rating the environment as more physically, psychosocially and person-centred (Degl' Innocenti et al., 2020). Patients' evaluations of new hospital environments after a relocation to evidence-based designed forensic psychiatric hospitals in three regions of the country also signalled that the new environments were highly therapeutic and health-promoting (Olausson et al., 2021). The hospitals were designed using a person-centred care approach and key themes arising from the studies highlighted the importance of a sense of self and autonomy and the ability to remain connected to life outside of hospital, privacy, comfort and harmony. The positive effects from the three new hospitals were sustained three years after the original data from old to new hospital environments was collected (Wijk et al., 2019).

Summary

Evidence based design (EBD) and person-centred approaches are seen across the world as key to the design of environments that support healing and well-being.

One major aspect repeatedly highlighted within evidence-based design is the link between healthy working and healing environments for patients.

provision of music, quality and intensity of ambient light, access to gardens and view of nature, reduction of crowding, ability to address preferences for colour, good wayfinding and spatial navigation, facilities for play and recreation, designs which include art and themes. Liddicoat (2020) explored the perspectives of service users and therapists on Australian mental health service waiting areas, finding that a poorly designed area can contribute to experiences of stigma and a lack of psychological and physical safety.

In **Sweden**, there has been significant discussion around the design of a patient-centred hospital that facilitates relationships in a safe and stress-free environment (Ulrich, 1991). Spaces that allow for social interaction are shown to reduce stress and relationships have been understood to be at the core of positive patient experiences (Lundin, 2021).

The 'supportive design' approach developed by Roger Ulrich has been widely adopted in Sweden, the focus being on ten stress reduction features: single patient bedrooms with private bathrooms, communal areas with ample space, designs with low social density (i.e. less people present in the same area), noise reduction, patient control in bedrooms, accessible gardens, nature window views, nature art, daylight exposure and communal spaces/bedroom doors that are observable from the central ward area (Ulrich et al., 2018).

On an acute psychiatric unit in **Italy**, Camuccio et al. (2019) suggest that social spaces can increase noise levels and acoustic pressure due to higher volumes of verbal communications and social activities. In related work, they have pointed to the central role played by social relationships (with visitors) in the overall 'ward climate'. When patients were authorised to have more visiting time and more mobile phone use, they felt much safer. However, this tended to produce the opposite effect in staff members, who perceived the ward to be less safe and less therapeutically effective.

Summary

Environments designed to support patient social interactions tended to be universally valued in mental health care. Facilitating social interaction, however, does appear to place an additional burden on ward staff.

Case Study
South Africa

Since the mid-1990s South Africa has worked towards the replacement of institutional care with community services, now written into The Mental Health Care Act of 2002 (Ramokgopa, 2012). Despite this, there is widespread stigmatisation and discrimination against individuals experiencing poor mental health. To address this, more work is needed to develop community-based services and education programmes as well as the integration of mental health care into general health settings, similar to existing public health practices around HIV infection reduction (Joska & Sordahl, 2012).

Adopting a patient centred approach and prioritising social relationships is at the core of therapeutic interventions in South Africa. A large proportion of the population still maintain traditional beliefs regarding mental illness and service users will often seek treatment from healthcare facilities alongside the use of traditional healers and spiritual advisors (Cromby et al., 2013). Greater dialogue is required between these two different systems of healing to create cultural congruence between service providers and service users (Petersen & Lund, 2011).

2. Relationships and social spaces

Designs that support social interactions can include features such as location adjacent to a community setting, the use of a smaller building, single and double bedrooms and a wide range of communal areas (Jovanović et al., 2019). Other features found to promote social relationships include the provision of open nursing stations and a good balance between private and shared spaces for patients and staff, the ability to rearrange furniture in small, flexible groupings, plants on wards, and private conversation booths (Jovanović et al., 2019). This focus on social spaces and supporting relationships varies across regions.

Social spaces within **Australian** paediatric hospitals are reported to support the psychosocial needs of young people and their well-being (McLaughlan, 2018). Gaminiesfahani et al. (2020) further identify as central the reduction of noise,

Is the future 'one size fits all' or integrated community care?

1. Urbanisation and mental health care

Urbanisation is a phenomenon related to increased populations moving (or fleeing) to towns and cities. We are now seeing the creation of new mega cities around the world because of the pressures placed on rural populations (Srivastava, 2009). The UN predicts 41 mega-cities around the world by 2030 with 66% of the world population living in Brazil, Russia, India, China and South Africa (BRICS) by 2050 (Szabo, 2018).

Unfortunately, with urbanisation comes major international social, economic, and environmental issues, with rising homelessness, violence, substance abuse and environmental pollution increasing mental health problems (Szabo, 2018). And yet, in a number of BRIC countries such as **South Africa**, mental health issues are a taboo subject and highly stigmatised, with limited mental health care provision (de Wet & Pretorius, 2022).

Mental health in **Brazil** has seen a shift from institutional to community care later than many other developing countries (Barros & Salles, 2011). There are now psychosocial care centres (CAPS) within the community offering a means of social inclusion to those with mental health challenges (Salles et al., 2015). CAPS are regionalised centres providing individual and group therapy along with home visits and community activities. They are designed to be welcoming spaces, to both the individual experiencing poor mental health as well as their families. The focus of CAPS is psychosocial rehabilitation, including integrating individuals back into the social and cultural context of their city or town. This local focus has led for calls for the integration of digital technologies into CAPS to widen the scope of engagement (Mota et al., 2022).

Russia has also witnessed mass migration which has negatively impacted mental health in some communities (Morozov, 2018). The response to this is the adoption of public health measures in communities, restricting alcohol and tobacco use, in order to reduce substance misuse and preserve mental health. Overall, however, primary health care does not have a large role to play in identifying and treating mental health issues (Rezvy et al., 2019) and thus there is argued to be a significant need to integrate Russian mental health services using telemedicine and digital technologies to communicate with those living in sparsely populated communities.

Precarious living imposes a significant risk of poor mental health in **India**. In New Delhi, for example, half of the population live in unplanned or unauthorised accommodation (Agarwal, 2019). Several projects are running in the area to improve the urban environment and in turn, mental health; pedestrian areas, more green spaces and a shift to renewable energy sources are some of the government initiatives developed to tackle this. In addition, the built environment, cultural background and stigma towards mental health across India can make it difficult for some people to access mental health services; mental health apps are being developed to support certain groups such as young people (Sethi, 2021).

The enormous economic growth in **China** over the past three decades has seen urbanisation rise significantly, in turn impacting mental health care (Szabo, 2018). Over the last decade, China has primarily invested in specialist psychiatric hospitals, and psychiatric units in general

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hospitals, with a 135% growth in hospitals to a total of 1545 in 2022 (Xu et al., 2022). Most Chinese hospitals use locked wards with a mixed population of mental health patients and tend to lack outside spaces. There has also been a transformation in Chinese mental health care, with traditional healing practices sitting alongside Western psychiatric approaches in the form of a 'bio-psycho-social' approach (Que et al., 2019).

The Danish based architect Cameron Clarke has proposed creating mental health care facilities in Beijing's hutongs, the alleyways and narrow lanes which feature in traditional Chinese urban design (Close to Home Project) as a means to combine traditional ways of living with contemporary mental health care innovations.

Finally, in **South Africa**, policies to provide mental health care have been developed around an ambitious plan, for 4% of beds in regional hospitals and on general wards to be allocated to mental health care, despite ongoing resource issues (de Wet & Pretorius, 2022). There are huge deficits in terms of mental health workers, hospitals, and hospital beds across the country (Pols, 2019; SAME Foundation). Whilst there is part healthcare, it is either private - with doctors and

psychiatrists or public, in the form of traditional healers (de Wet & Pretorius, 2022). Foundations such as SAME have been raising funds for beds in small local hospitals to cater for patients sleeping on hospital floors (Pols, 2019).

Summary

There is global recognition that increasing support is needed for mental health issues, as a known consequence of ongoing urbanisation. This appears to be divided by community-based support, which can include innovative services aimed at social inclusion, such as the Brazilian CAPS, alongside a drive to expand the scale and reach of inpatient services using the existing model of specialist psychiatric hospitals and dedicated wards in general hospitals. There do not appear to be any international examples where it is felt that existing resources meet current needs.

2. Building for the future

Across the world we are seeing widespread efforts to transition mental health care into the community. This brings considerable challenges for many countries who experience an overall reduction of mental health support staff (Barbui et al., 2018).

Across much of **Western Europe**, there is consensus relating to the need to pivot away from inpatient care where possible toward a more community and outpatient mental health system. **Italy** has been without dedicated mental health hospitals for over 40 years, successfully transitioning the majority of mental health care from hospital into the community (Barbui et al., 2018). And yet, in comparison with other G7 countries, Italy now has less mental health staffing per 100,000 population and decreased resources overall in this area. Italian community services are also typically used as long-stay residential services, indicating a residual need for long-term care options.

Even a near full shift from institutional to community care still requires spaces for those who need long term support (Taylor et al. 2009). According to the international review of longer term social and psychiatric care by Taylor et al., (2009), authors suggest these places should ideally be community based, flexible, hold fewer residents and preserve autonomy. In **Australia**, Prevention and Recovery Care (PARC) services

are one example of a move away from long-term hospital stay to community based residential alternatives for those with severe mental health problems (Harvey et al., 2019). PARC services offer short term residential individual care, bearing some resemblance with the USA model.

The **USA** mental health system is also seeing a shift to outpatient and community-based care. Michas (2022: 1) reported that "as of 2020, there were 12,275 registered mental health treatment facilities in the U.S. Within those, 9,634 were less than 24/7 outpatient facilities while 1,806 facilities were 24/7 inpatient facilities" equating to less than one third being inpatient facilities. There are calls to merge mental health and general health care for those unable to access services and introduce a prevention-based approach to reduce mental health problems (Mental Health America, n.d.). One of the potential obstacles to service access is the language barrier that exists for around 9% of the US population (Ohtani et al., 2015).

In **Japan**, there are community-based services known as psychiatric social rehabilitation facilities. Patients and staff in Japan have expressed the need for more 24/7 health-care facilities with crisis consultation services deemed necessary (Miyamoto et al., 2015). In general, Japanese

mental health care has been slow to develop patient-centred approaches, with a continuing reliance of institutionalised inpatient care. Specific community needs are often not fully appreciated and there appears to be something of a divergence in perceptions around the need between service users and service providers. Kazano (2012) suggests that creating spaces and places of "sanctuary" and "retreat" within a therapeutic landscape may be a means to close this gap.

Summary

Questions remain over the suitability of psychiatric inpatient facilities as a necessary means to treat mental health challenges in the long-term. And yet, whilst the value of community services is broadly acknowledged internationally, community care does not always appear to lead to greater resources and optimum care. Moreover, though there is broad consensus around the need to de-institutionalise mental health care, there is far less clarity surrounding the best way to implement this.

Case Study
China

The *Close to Home* project is a speculative architectural research project led by the Danish based architect Cameron Clarke. It based around a model of local based interventions within the urban setting of Beijing, which is experiencing significant needs around mental health services. Clarke's vision is around strengthening existing communities and neighbourhood structures. Neighbourhoods in Beijing were traditionally organized around densely populated clusters of communities, streets and buildings known as Hutongs. Clarke's project tries to emulate the community resilience of traditional Hutongs through a mixture of spatial interventions, technological innovations (include the use of Virtual Reality treatment and telemedicine) and urban community support groups.

The project takes the old district of Xicheng as its test site; home to a well-established psychiatric hospital and a population of 1.3 million. At the heart of the plan is an urban-wellness clinic, which acts a node through which distributed services can be offered. By modelling mental health services on the urban spaces and communities which they serve, innovative plans like this might help to bridge the gap between institutionalised and community healthcare provision and start to model services along the needs of service users and the wider communities in which they are situated.

Safety Reducing & Enhancing Environments

1. The use of locked wards and restrictive practices

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Healing, Health & Therapeutic Architecture

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Recovery & Patient Focussed

1. Evidence based design and built for 'user' purpose

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Is the future 'one size fits all' or integrated community care?

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2. Building for the future

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