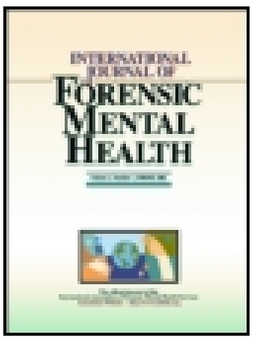

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Organizing Forensic Mental Health Care Delivery: Putting the Trinitarian Model of Therapeutic Security to the Test

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ABSTRACT

The Trinitarian model of therapeutic security is used to organize forensic mental health care in Ireland, England and Scotland. However, it remains unclear whether this model captures all significant factors for the organization of forensic mental health care delivery. In this case study, the Trinitarian model is applied to and tested on Belgian forensic mental health services. Relational security as a discriminative factor is debated and an extension of this institution-oriented model to the policy- and service users' level is recommended. Finally, we propose to disentangle the concepts of therapeutic security, risk and care in forensic mental health.

KEYWORDS

Forensic mental health organization; therapeutic security; risk management; Persons labeled Not Criminally Responsible

Introduction

Deinstitutionalization in mental health care from the 1960s and 70s onwards has been followed by the expansion of community-based services and led to the development of the strengths-based recovery paradigm. Yet, only in the last decade an interest in recovery of Persons labeled as Not Criminally Responsible (PNCR) emerged (Aga et al., 2020; Vandevelde et al., 2017).

Persons labeled Not Criminally Responsible are adults considered unaccountable for (some of) their offenses due to mental illness. Forensic mental health care in Europe concerns both the psychiatric treatment and risk management of Persons labeled as Not Criminally Responsible, and mostly consists of designated wards in prison, secure forensic-psychiatric hospitals and community treatment services (Völlm, Clarke, et al., 2018). Forensic care trajectories are supposed to support recovery and desistance from crime (Van Roeyen, Van Audenhove, & Vander Laenen, 2016).

In some places, the recovery paradigm urged a pivotal change in forensic mental health care. In Italy, for instance, forensic mental health care is currently provided in regional community based services to enhance the social integration of Persons labeled as not Criminally Responsible (Carabellese & Felthous, 2016). In other countries (e.g. U.S.A., Belgium or Norway), Forensic Assertive Community Treatment has been implemented to provide community-based services to Persons labeled as Not Criminally Responsible (Landess & Holoyda, 2017; Marquant et al., 2018; Stuen et al., 2015). In any case, forensic mental health services have to address risk and safety in a therapeutic environment (Warburton, 2014, Völlm, Clarke, et al., 2018). As such, the recovery paradigm increasingly compels us to question the organization of forensic mental health care delivery.

A growing body of literature describes the current organization of forensic mental health care delivery in Europe, only to conclude how diverse national forensic mental health practices and their legal frameworks are (Edworthy et al., 2016; Van Lier & Tort-Herrando, 2018; Völlm & Braun, 2019; Völlm, Clarke, et al., 2018). For example, Germany and the Netherlands operate under Roman law and adopted a whole system approach (i.e. all security levels are provided in different wards of one forensic mental health service) compared to England and Wales operating under common law and providing different levels of security

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in separate services (e.g. medium secure services, high secure services) (Edworthy et al., 2016).

Regardless of differences between countries, differentiating and classifying forensic mental health services is a key feature to service planning and to access of Persons labeled as Not Criminally Responsible to appropriate care (Collins & Davies, 2005; Kennedy, 2002; Salize et al., 2005). However, without any internationally agreed or standardized indicators, comparison and identification of good practices in forensic mental health organization proves to be a challenge (Salize et al., 2005).

In academic literature, multiple criteria have been used to classify or differentiate between forensic mental health services, such as legal and policy frameworks (Carabellese & Felthous, 2016; Edworthy et al., 2016; Goethals, 2018), population characteristics (e.g. type of offense or demographic) (Kennedy, 2002; Ramsden et al., 2017), degree of specialization or type of intervention (Kennedy, 2002; Ramsden et al., 2017; Van Lier & Tort-Herrando, 2018), and therapeutic security levels or 'The Trinitarian Model' (Bergman-Levy et al., 2010; Crichton, 2009; Kennedy, 2002).

Whereas the former criteria are merely descriptive, the Trinitarian model relies on the concept of 'therapeutic security' to differentiate between services and to structure forensic mental health care. Therapeutic security considers security as essential to the therapeutic process and refers to a multitude of measures taken to ensure the safety of staff members and residents in a therapeutic environment (Bergman-Levy et al., 2010; Collins & Davies, 2005; Crichton, 2009; Warburton, 2014). The Trinitarian model of therapeutic security has been developed by the Reed Committee (commissioned by the U.K. Department of Health) in England and is used in England, Scotland and Ireland to organize forensic mental health care.

In this model, therapeutic security consists of three factors, being environmental, relational and procedural security (Collins & Davies, 2005; Crichton, 2009; Kennedy, 2002). A detailed and technical description of these security features is found in Kennedy's (2002) application to the Irish and Crichton's (2009) application to the Scottish forensic mental health care provision.

In the Trinitarian model, environmental (or physical) security consists of interventions in the perimeter (e.g. fenced or walled), building (e.g. locked doors and windows), observation (e.g. CCTV) or alarm systems (e.g. wall-mounted alarms) of the facility. Next, procedural security refers to the regulation of visits, communication, personal finances and possessions. Relational security technically concerns staff-to-patient ratios, frequency of risk and treatment plan reviews, specialist treatment skills (e.g. anger management), inter-agency work (e.g. contact with courts) and recreational programs (e.g. sheltered workshops). In addition, Collins and Davies (2005) and Kennedy (2002) describe the qualitative aspect of relational security and stress the importance of knowledge and trust between residents and staff.

The Trinitarian model defines different levels of therapeutic security, being high, medium or low. As such, a higher level of restriction in environment and procedures and higher intensity of relational features in a forensic mental health service corresponds with a higher level of therapeutic security, and vice versa. Safety and security are identified as key components to forensic recovery and Persons labeled as not Criminally Responsible usually progress through these services according to their security needs, ranging from high to low (Bergman-Levy et al., 2010; Pillay et al., 2008; Shepherd et al., 2016; Völlm, Edworthy, et al., 2018). However, it remains unclear whether the Trinitarian model of therapeutic security captures all significant factors in forensic mental health organization. For instance, a U.K. study found no consensus among forensic experts on the essential character of the three therapeutic security factors for high secure forensic services (Tapp et al., 2016).

In this study, the goal is to examine the adequacy of the Trinitarian model of therapeutic security, based on the detailed technical description in Kennedy's (2002) and Crichton's (2009) papers, to structure forensic mental health organization by applying it to the Belgian case. Ireland, Scotland and England are all National Health Systems (NHS), whereas Belgium is a social insurance, regulated-market system. Both systems are different in terms of care provision and coordination (Nicaise et al., 2020). Therefore, in applying the Trinitarian model of therapeutic security to the Belgian case, and comparing this to the applications in Scotland (Crichton, 2009) and Ireland (Kennedy, 2002), we can further validate the Trinitarian model as a tool for forensic mental health organization in care delivery systems different than NHS.

The state of Belgium has been condemned several times by the European Court of Human Rights (ECHR) for the inhumane treatment of its Persons labeled as Not Criminally Responsible because of the inaccessibility of mental health care services for this population (Heimans & Vander Beken, 2015). Most Persons labeled as Not Criminally Responsible had no

other option than to reside in prison without (sufficient) mental health care. This compelled the responsible governmental bodies, i.e. the federal departments of Public Health and Justice and the regional Welfare department, to introduce policy reforms to positively impact care provision for Persons labeled as Not Criminally Responsible in Belgium.

Since then, investments resulted in an expanded forensic mental health care provision. In the Dutch-speaking region (i.e. Flanders), most capacity for Persons labeled as Not Criminally Responsible is provided in conventional psychiatric hospitals and community services, often with designated forensic wards and treatment, while in the French-speaking region (i.e. Wallonia) Persons labeled as Not Criminally Responsible are generally admitted in specialized prison wards (i.e. prisons with the presence of mental health staff) or in a few psychiatric wards that have high environmental security features, next to additional capacity in conventional psychiatric hospitals and community services. New to Belgian forensic mental health care is the possibility of services to be run by private for-profit actors instead of nonprofit organizations and the first privately run forensic mental health service opened in 2014 (Pesout & Pham, 2019).

For policy and organizational purposes, it is customary to label forensic mental health services in Belgium as high- or medium-secure. Yet, any clear definition of these security levels is absent (Jeandarme et al., 2019). The recent policy reforms have come without transparent criteria of differentiation between services or guidelines for care pathways (Pesout & Pham, 2019). In addition, Belgian Persons labeled as Not Criminally Responsible signal how in- and exclusion criteria (e.g. diagnosis, gender, offense) inherent to forensic mental health services' policies continue to obstruct relevant transitions in their care trajectory (De Pau et al., 2020). Appropriate admission of Persons labeled as Not Criminally Responsible in need-based services, but also service planning and auditing can only be achieved by structuring forensic mental health services using standardized indicators (Collins & Davies, 2005; Kennedy, 2002; Salize et al., 2005). In this respect, Belgian forensic mental health care is in dire need of a clear organization model.

Considering the regional differences, complex state structures and recent reforms in forensic mental health organization (Pesout & Pham, 2019; Vander Laenen, 2016), Belgium is a challenging and thought-provoking case. As such, it is an excellent starting point to explore and identify which factors should be taken into account or inevitably influence forensic mental health organization, ultimately leading to the validation of the therapeutic security factors in a social insurance, regulated-market care system or a proposition for possible adaptations of the Trinitarian model. In this study, we apply the Trinitarian model to the Belgian forensic mental health care provision and reflect, in consultation with policy stakeholders, on relevant criteria to its' organization.

Methodology

This study is part of the For-Care research project, commissioned by the federal department of Public Health. During the project, the reform policy of forensic mental health organization in Belgium has been evaluated. As such, the lack of a common understanding of forensic mental health care organization became increasingly apparent. This case-study used mixed methods, such as content analysis, a literature review, and an application exercise in collaboration with two policy stakeholders.

A literature search, performed in October 2017, aimed to expand our knowledge on potential relevant criteria in the organization of forensic mental health care delivery. The research equation used in the Pubmed, Psycinfo and Scopus scientific databases was "forensic psychiatry" AND ("safety management" OR "risk management" OR "security") AND "mental health services" AND NOT ("child" OR "youth" OR "treatment" OR "therapy"). By excluding the terms "child", "youth", "therapy" and "treatment" the focus of the search is limited to the structural organization of forensic mental health services for adults and did not include medication or therapy used for safety management nor forensic mental health services for minors. Articles, reviews, short reports and other scientific output published between 2002 and 2018 in English, French or Dutch were included. A set of 108 articles was retrieved after excluding duplicates. These articles were manually screened for titles and abstracts, resulting in a final set of 35 included articles.

Articles were excluded if the study population was not described in detail or when the topic diverted from forensic mental health organization (e.g. psychometric values of assessment tools, patients' outcomes and specific interventions).

The result led the authors to build a theoretical framework on forensic mental health organization (cf. result section, Figure 2). The Trinitarian model of therapeutic security used in this framework is based

on the technical descriptions in the papers of Kennedy (2002) and Crichton (2009), which are the only academic works that we could find which describe the model in such detail.

To apply the theoretical framework, including the Trinitarian model of therapeutic security, to the Belgian forensic mental health care provision, a database consisting of all Belgian (forensic) mental health services who admit Persons labeled as Not Criminally Responsible was consulted. An examination of these data provided insight in the current forensic mental health care provision in Belgium per region. Next, a content analysis consisted of analyzing policy documents, obtained from the Belgian federal department of Public Health, public websites, and leaflets of (forensic) mental health services (Bowen, 2009). These documents were supplemented by the researchers' knowledge of (forensic) mental health care services' security features obtained during professional visits or research activities on site. This resulted in data on Belgian forensic mental health services, their activities and on (some of) their security features.

The theoretical framework on forensic mental health organization was applied to the Belgian case of forensic mental health services, aided by the collected information of forensic mental health services in Belgium. A preliminary classification has been developed in deliberation with all authors. This classification included every (forensic) mental health service admitting Persons labeled as Not Criminally Responsible in Belgium labeled as high, medium or low secure based on the information about its environmental, relational and procedural security features obtained during the document analysis and observations. In addition, responsible governmental bodies, their authority level and general profile of admitted Persons labeled as Not Criminally Responsible were established for every (forensic) mental health service.

While classifying (forensic) mental health services according to the theoretical framework, difficulties surfaced. For instance, services might have high relational security features and lower procedural and environmental security features, or vice versa. These 'difficult cases' were discussed with two expert stakeholders from the federal policy level (one for the Dutch language region of Flanders and one for the French language region of Wallonia) which had been selected for their extensive knowledge of forensic mental health care provision in Belgium. During two meetings between the Dutch-speaking expert and two of the Dutch-speaking authors and two meetings between the French-speaking expert and one of the French-speaking authors, the preliminary classification of forensic mental health services was reviewed. Consequently, the expert policy stakeholders evaluated the relevance of the therapeutic security components as suggested in the Trinitarian model and other criteria of the theoretical framework in deliberation with the authors. In consensus, an organizational model and classification of Belgian forensic mental health services according to high, medium and low security level was developed.

This manuscript is based on the ForCare project funded by the Belgian federal authorities (grant number: PSY/VL/03/2016/256117). The data used in this part of the study (e.g. results literature review, public information on services and voluntary participation of policy stakeholders) are not sensitive data and do not require ethical approval. Other work under the ForCare project, that does involve sensitive data about forensic service users, are covered by ethical approval but are not part of this manuscript.

Results

Theoretical framework for forensic mental health organization

The literature review revealed several criteria that were relevant to appraise the forensic mental health organization. First, forensic mental health care is influenced by both the public health policy and the criminal law framework (Edworthy et al., 2016; Goethals, 2018). As such, different governmental bodies regulate forensic mental health organization, i.e. Justice, Public Health and Welfare. Currently, a global trend toward transferring forensic care competences from Justice to Public Health is observed (Carabellese & Felthous, 2016; Cartuyvels, 2017; Traverso & Traverso, 2017). These governmental bodies exist on the national, regional or local authority level. Decentralization toward lower levels of authority aims to organize health care 'closer to the people' (Saltman & Bankauskaite, 2006). In addition, it can indicate a higher involvement of Persons labeled as Not Criminally Responsible and their families in decision-making about their care trajectories or a greater attention to social integration (Carabellese & Felthous, 2016; Traverso & Traverso, 2017).

Second, the Trinitarian model of therapeutic security is used in England, Scotland and Ireland to describe forensic mental health services according to their security features (i.e. environmental, procedural and relational) and develop a distinction between high-, medium- and low-secure care (Bergman-Levy

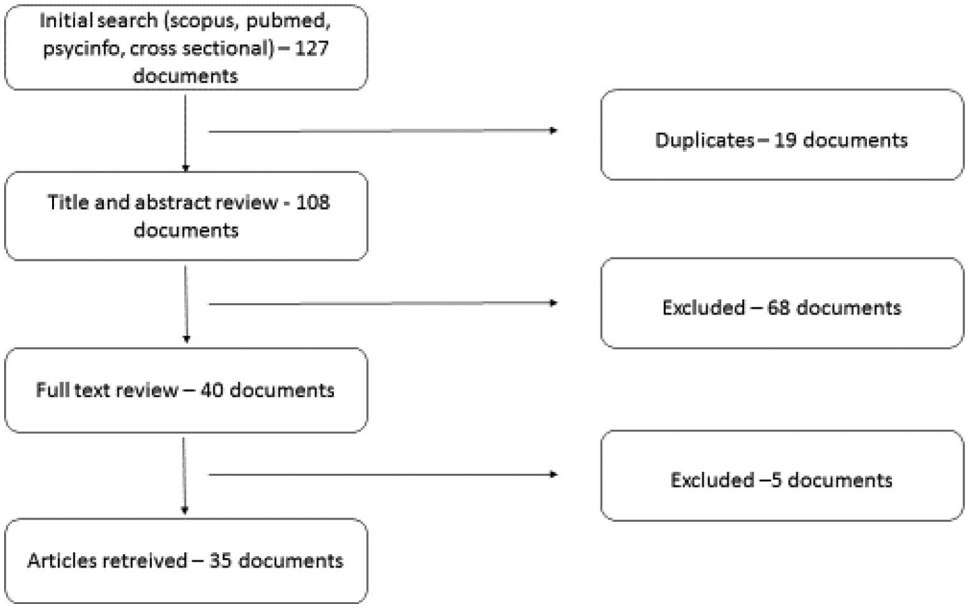

Figure 1. Flow diagram for article inclusion.

et al., 2010; Collins & Davies, 2005; Crichton, 2009; Kennedy, 2002).

Third, forensic mental health services can be designed specifically for sub-groups of Persons labeled as Not Criminally Responsible due to their characteristics, such as diagnosis, gender or offense (Kennedy, 2002; Sugarman & Oakley, 2012). For example, forensic wards for females, persons with an intellectual disability or sexual offenders are created (Ramsden et al., 2017).

In sum, the literature review indicated that the Trinitarian Model of therapeutic security is the only conceptual framework currently used to organize forensic mental health care. However, different governmental bodies and population characteristics seem to influence the organization of forensic mental health care delivery. Thus, the Trinitarian model of therapeutic security would gain in comprehensiveness by considering (1) the governmental body responsible for organizing services, as well as their level of authority, and (2) population characteristics to forensic mental health organization. Such extension leads to the framework presented in Figure 2.

Applying the theoretical framework to the current Belgian forensic mental health care system

The theoretical framework for the classification of forensic mental health services according to therapeutic security features was applied to the current Belgian system. This resulted in a few services listed as high secure and some as medium secure, while most of the services were classified as low secure. The (forensic) mental health services classified as low secure seem to be more diverse than services of the other security levels, consisting of both outpatient and inpatient, forensic and regular mental health services.

Figure 3 provides a classification of the Belgian (forensic) mental health care system according to three security levels. This classification shows that the highest level of security is predominantly composed of services organized and funded by the federal Justice department. For instance, prison psychiatric annexes are considered highest security. These services admit Persons labeled as Not Criminally Responsible and are characterized by high secure environmental and procedural features (e.g. high walls, CCTV, strict control of visitors). Yet, prison annexes of correctional facilities in Belgium are often marked by low psychiatric care and, as such, differentiate themselves from forensic mental health services. Then, high-secure forensic mental health services are organized and funded by both the federal Public Health and Justice department and offer intensive psychiatric care exclusively to compulsory placed Persons labeled as Not Criminally Responsible in combination with high environmental and procedural security (e.g. high walls, CCTV, strict control of identity of visitors and their belongings). In this respect, two categories of high secure care are disentangled. Currently, Persons labeled as Not Criminally Responsible are diverted from prison annexes, whom are considered unsuitable for this population (Vander Beken, 2017), to forensic mental health services.

Medium secure mental health services (e.g. medium-secure wards in conventional psychiatric

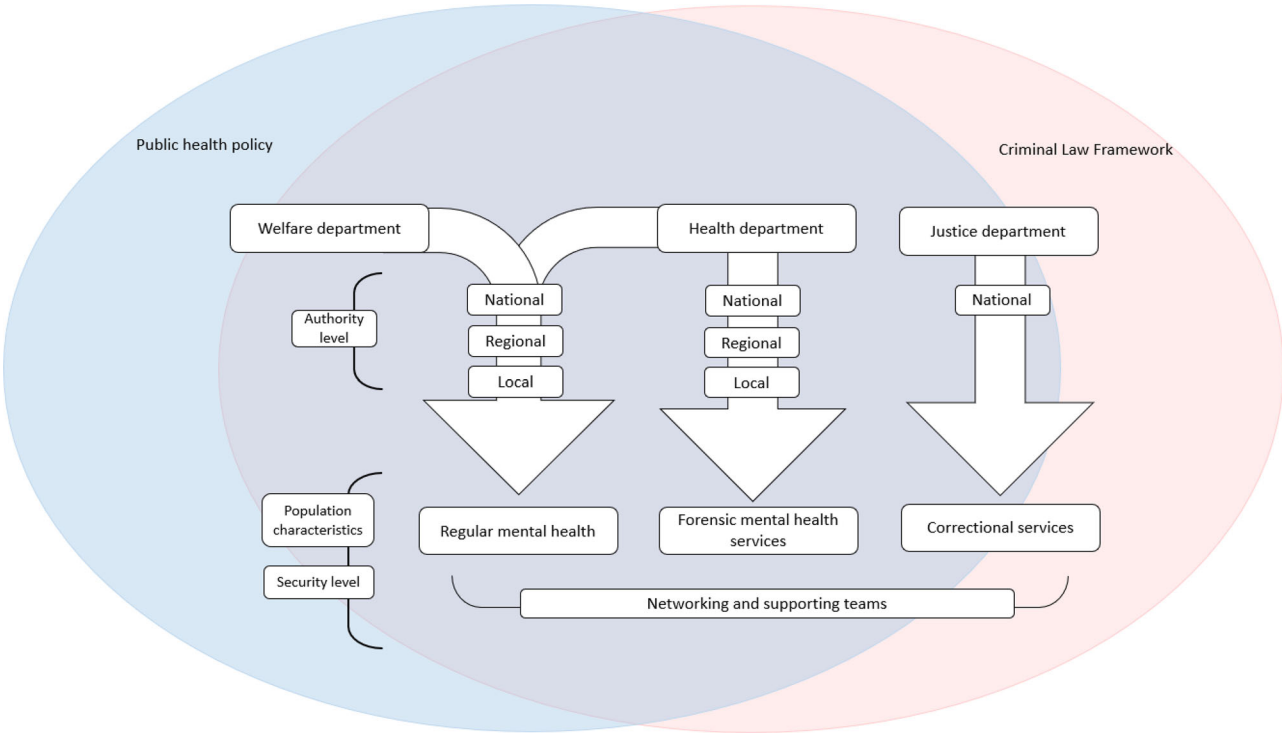

Figure 2. Theoretical framework of forensic mental health organization.

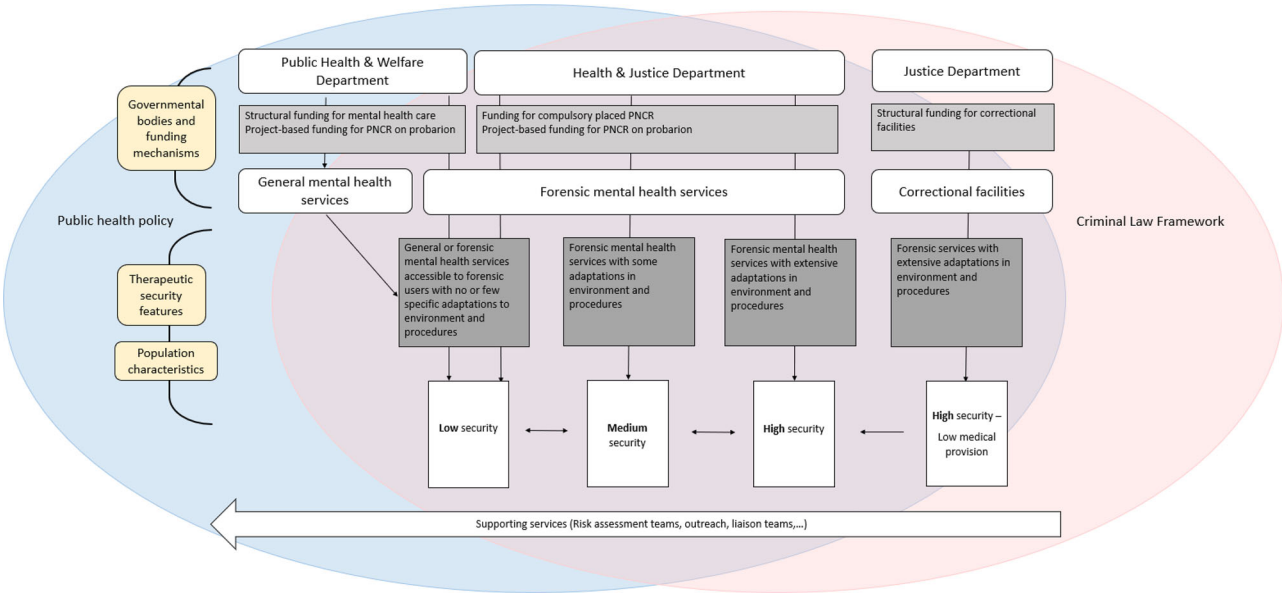

Figure 3. Belgian forensic mental health care organization.

hospitals) are organized and funded by the federal Public Health department and, in cases of compulsory placement, by the federal Justice department. Medium secure services do not exclusively serve a population of Persons labeled as Not Criminally Responsible, though they receive additional financial means from the federal authorities for that purpose, thus they have separate wards with environmental and procedural security features for Persons labeled as Not Criminally Responsible (e.g. fences, control of identity visitors). Some wards are designated for specific subgroups, such as Persons labeled as Not Criminally Responsible who committed a sexual offense or have an intellectual disability.

Low-secure services are comprised of two categories. The first category consists of general mental health services which are organized and funded by the regional Health or Welfare departments and receive

additional funds from the federal Public Health department for providing care to Persons labeled as Not Criminally Responsible (in some cases for specific subgroups with for instance, dual diagnosis or Korsakov syndrome). Second, other general mental health care and welfare services admit Persons labeled as Not Criminally Responsible albeit without receiving additional funding to organize their care. In both cases, there are no (or few) specific environmental and procedural security features (except for the usual standard in general mental health care), and Persons labeled as Not Criminally Responsible and general mental health service users are generally mixed. Yet, in practice, low secure wards exclusively admitting Persons labeled as Not Criminally Responsible have been detected as well. As such, one can see a large range of low secure care provision for Persons labeled as Not Criminally Responsible indicating a gradual integration of forensic mental health care into regular mental health care when security features are lower.

In addition, a specific cross-level position was considered for supporting and liaison services, which is the case for outreach initiatives, support for professionals and forensic community mental health teams among others. These services provide support to Persons labeled as Not Criminally Responsible and professional teams across all security levels and are funded by the federal Justice and Public Health authorities. Their main mission is to foster collaboration across services, to facilitate the transition of Persons labeled as Not Criminally Responsible to a lower level of security if possible and to support general mental health professionals with their care for Persons labeled as Not Criminally Responsible.

Toward an adapted forensic mental health organization model

The applied framework for Belgian forensic mental health organization was presented to and discussed with two policy stakeholders, i.e. one in the region of Flanders and one in the region of Wallonia. During the discussion of difficult cases (cf. Methodology section), policy stakeholders agreed with the researchers on the importance of environmental and procedural security to differentiate between different levels of therapeutic security and organize forensic mental health care.

In contrast, the discriminative power of relational security was considered not sufficient. Features of relational security, i.e. staff-to-patient ratio, interagency work, recreational programs, frequency risk and treatment plan reviews, specialist treatment skills and qualitative characteristics (e.g. trust between residents and staff) should be adequate at any level and not diminish in medium or low secure services compared to higher security levels. In reality, relational security features do vary but not in correlation to environmental and procedural security features. For instance, staff-to-patient ratios are not necessarily higher in services with high procedural or environmental security features while specialist treatment skills can be provided in services with low or medium procedural and environmental security features.

Another challenge was raised by the policy stakeholders in applying the theoretical framework. In Belgium, the healthcare system is a regulated-market care system based on a compulsory social insurance scheme, which leaves extensive autonomy to individual services for their own organization (Gerkens & Merkur, 2010; Nicaise et al., 2020). Therefore, most care services, including psychiatric hospitals and specific forensic mental health services, often maintain their own in- and exclusion criteria for admission. As such, the risk exists that some subgroups of Persons labeled as Not Criminally Responsible with specific needs are excluded from a specialist approach (e.g. persons who committed a sexual offense, persons with an intellectual disability). This situation may make it more complex to organize forensic mental health care provision as one needs to plan designated wards or treatment places for certain groups of Persons labeled as Not Criminally Responsible to guarantee inclusivity of forensic mental health care.

Next, extensive political decentralization toward health care networks and individual psychiatric hospitals has left Belgium with a patchwork of different forensic mental health services per region. A number of distinctive services, each with their own forensic care framework, security features and/or population profiles, can be identified. Such services can be labeled as 'in between'. For instance, forensic sheltered living initiatives are financed at the federal authority level for Public Health, but offer forensic treatment within low environmental and procedural security features exclusively for Persons labeled as Not Criminally Responsible. While the funding mechanism would indicate a higher secure framework, the actual security features clearly demonstrate a community-based approach. Such low-secure forensic services permeate the low-security level of services, which used to be comprised mainly of regular mental health services, while retaining an exclusive forensic character (e.g. target population of Persons labeled as Not Criminally

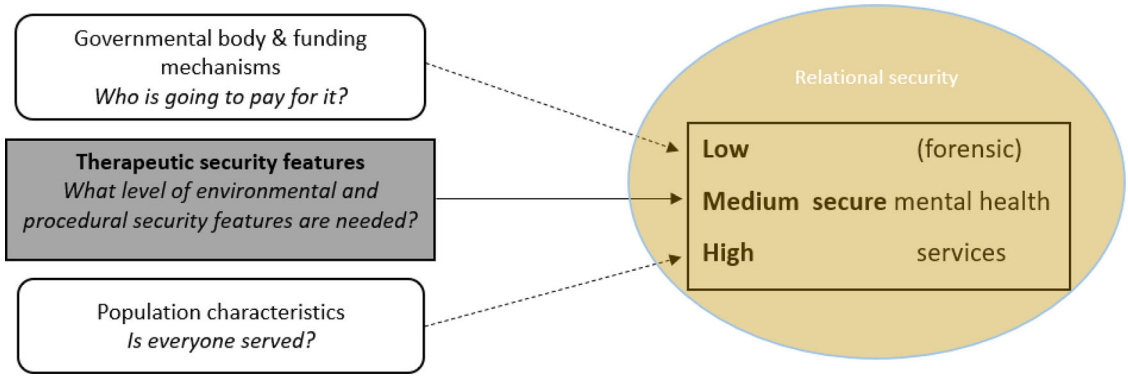

Figure 4. Adapted organizational model for forensic mental health care delivery.

Responsible and forensic treatment). In another example, forensic mobile teams (or forensic assertive community treatment teams) are funded by the federal Public Health department while offering outpatient care to Persons labeled as Not Criminally Responsible. Such initiatives are difficult to categorize and suggest a need for primary and secondary classification criteria.

Thus, retaining only the environmental and procedural security factors of the Trinitarian model, combined with additional factors of funding mechanisms and population characteristics for organizing forensic mental health care, an adapted organization model was developed (see Figure 4). Considering the importance of therapeutic security in the provision of needs-based forensic mental health care (cf. discussion section), this is considered to be the primary factor in decision-making. If a therapeutic security need (high, medium or low) has to be catered for, secondary organizational questions will concern the accountable governmental bodies, its available funding and inclusivity for all Persons labeled as Not Criminally Responsible. Relational security should be adequate in all levels of secure forensic mental health care delivery.

Discussion

The Trinitarian model of therapeutic security seems to cover two relevant factors for forensic mental health organization, i.e. environmental and procedural security. The component of relational security is, in line with Crichton's (2009) argumentation, not a good discriminator between security levels. Relational security features should be acceptable over security levels (high, medium and low) and not diminish in lower secured services. In addition, the U.K.-based See Think Act guide for the enhancement of relational security in secure mental health services states how the three components of security (relational, physical and environmental) are interconnected and essential at all times.

However, the guidelines do not advocate for higher or lower relational security features according to the services' security level (The Royal College of Psychiatrists, 2015). Reality often differs, as Chester et al. (2017) even found lower relational security in medium secure compared to low secure services. Tapp et al. (2016) did find relational security to be important in high secure services, yet, there was no comparison of the relevance of this factor to other secure services and thus, the discriminative character was not identified as such. Collins and Davies (2005), in accordance with Chester et al. (2017), describe 'relational security' as:

> A detailed understanding of those receiving secure care and how to manage them. For example, a competent forensic nurse will have an extensive knowledge of a patient. This will include potential risk behaviors and a relationship with the patient that includes an open acknowledgement of the potential for dangerous behavior. This level of knowledge allow the practitioner to constantly assess behaviors, patterns of behavior and changes in mental state that have a direct relationship to any immediate or potentially dangerous behavior or similarity to offending patterns. *This level of knowledge can enable care to be delivered in an environment where levels of restriction and supervision can be varied according to the needs of the patient while maintaining the protection of others* (emphasis added) (Collins & Davies, 2005, p. 41).

Despite the narrow focus on risk management and relational security, the authors acknowledge that relational security can be delivered in varying levels of restriction. No academic work or practical guide has, so far, delivered convincing argumentation for the discriminative strength of the relational security factor. While relational security is one of the key components of forensic recovery (Shepherd et al., 2016), this case

study has not found any benefit of this component as a discriminative factor among services.

Conversely, the importance of resource allocation, governmental bodies' responsibilities and population characteristics (e.g. subgroups with an intellectual or learning disability, personality disorder, sexual or arson index offenses) in appropriate admission of Persons labeled as Not Criminally Responsible has been reflected upon in earlier papers (Flynn et al., 2011; Hall et al., 2014; Tetley et al., 2010; Völlm, Edworthy, et al., 2018) and prove to be relevant factors in this study of forensic mental health organization as well. As such, the extension of the institution-oriented Trinitarian model of therapeutic security to the policy level (i.e. funding mechanisms by governmental bodies) and to the service users' level (i.e. population characteristics) seems to be in agreement with other academic research.

In any case, this study is an attempt to develop an organizational model for forensic mental health care delivery based on standardized indicators. International debate about and reflection upon effective forensic mental health organization can contribute to good practices. It can lead to the provision of a safe therapeutic environment based on the needs of Persons labeled as Not Criminally Responsible, enhancing positive outcomes, such as desistance from crime and recovery (Vandevelde et al., 2017).

In this respect, it is important to disentangle the concepts of (therapeutic) security, risk and care. While several authors (Collins & Davies, 2005; Kennedy, 2002; Tetley et al., 2010) seem to presume a positive correlation between therapeutic security needs and risk, others clearly differentiate between these concepts (Bergman-Levy et al., 2010; Flynn et al., 2011). In the case of risk and therapeutic security, these concepts are measured by different standardized instruments, such as the HCR-20 (Douglas et al., 1999) for risk and the DUNDRUM Toolkit (Kennedy et al., 2013) or the HoNOS-Secure (Dickens et al., 2007) for therapeutic security needs.

Research shows no significant correlation between the HCR-20 and DUNRUM Toolkit (Davoren et al., 2015; Flynn et al., 2011), while the DUNDRUM Toolkit correlates with the HoNOS-Secure (Jeandarme & Habets, 2019). As such, risk-oriented and security-oriented instruments prove to measure two different concepts. Thus, a high risk profile does not necessarily correlate with a high security need. For instance, a person who committed murder and experiences psychotic episodes might show a high HCR-20 risk profile but can be managed perfectly in a medium secure service, while a person with a drug offense and personality disorder might show a low HCR-20 profile but needs to be managed in the same medium secure service due to multiple absconding (from services or while on leave) and drug possession incidents, which indicates there are higher therapeutic security needs for this person.

Parallel comparisons can be made for the relation between care and therapeutic security. The severity of the mental illness and thus, the need for intensive care does not necessarily correlate with the need for therapeutic security. For instance, a severely depressed person who committed a violent offense and who shows a low HCR-20 risk and security need profile might be adequately admitted in a low secure service (e.g. conventional psychiatric hospital wards). Adversely, if this person presents himself with serious self-harming behavior, suicidal ideation and attempts to abscond, it might be better to provide medium or even high secure care.

The decision should be always guided by the principle of least restrictiveness, and structured clinical judgment instruments can aid in this decision-making. As mandatory forensic psychiatric treatment is very invasive to an individual by restricting one's liberties, this care should be provided in the least restrictive service or manner (Kennedy, 2002; Tomlin et al., 2018). Thus, in admitting Persons labeled as Not Criminally Responsible to appropriate forensic mental health services the primary concern is the need for an appropriate level of therapeutic security. In a safe therapeutic environment, mental illness and risk can be further managed.

In conclusion, the essential element of organizing forensic mental health care is the provision of therapeutic security at different levels, influenced by both governmental bodies' funding mechanisms and population characteristics. So far, decision-making in Belgium to divert Persons labeled as Not Criminally Responsible to appropriate care is grounded in unstructured judgment and lacks definition of security levels for Belgian (forensic) mental health services (Jeandarme et al., 2019). Generally, services are informally appraised through professional expertise, which largely relies on a risk-based perspective.

In addition, the regulated market-system of health care in Belgium accommodates the use of in- and exclusion criteria, which provokes the exclusion of people, specifically Persons labeled as Not Criminally Responsible, in need of appropriate care (De Pau et al., 2020). Therefore, it is indispensable that security levels of (forensic) mental health services are formally

Table 1. Criteria for excluding documents.

Exclusion criteria	Number of documents excluded
Psychometric values of assessment tools	n = 27
Patients' outcomes and experiences on specific interventions	n = 13
Offenders and absconders characteristics	n = 10
Unspecific MDOs/SMI	n = 6
Role of professionals per type of profession	n = 4
Relationship between diagnosis and violence	n = 3
MDOs' use of services MDOs	n = 2
Therapeutic alliance	n = 2
MDOs social network	n = 2
Victims experiences	n = 1
Specific national jurisprudence case study	n = 1
Others	n = 3

defined and shared across services to enhance collaboration and provide inclusive and appropriate care for Persons labeled as Not Criminally Responsible. The extended Trinitarian model, as proposed in this article, offers a framework for clarifying relevant criteria in forensic mental health organization in Belgium, but it also encourages reflection for countries with other forensic mental health systems.

Some limitations and specifications have to be taken into account with respect to this study. In Belgium, most residential forensic mental health services have adopted the whole system approach, thus providing care of all security levels in one service. For instance, a forensic mental health service can consist of a high secure (admission) ward, medium and low secure wards, catering all therapeutic security needs. The classification developed for this paper is limited to these services' position in the full range of forensic mental health care provision and does not focus on each individual ward and their respective security level within these services. An exception is made if elements clearly differentiate from the general treatment in this service, for instance a high secure ward for compulsory placed women in a generally medium secure service.

One of the weaknesses of this study is the limited validation of the Trinitarian security criteria and the adapted organization model with experts or practitioners. However, the classification of forensic mental health services according to security levels is a sensitive exercise. Services might fear that resources will be (re)considered according to the outcome of this classification (Hall et al., 2014), especially since this study has been commissioned by the federal department of Public Health, and, as a result, might feel the need to classify themselves as higher or lower secure on the spectrum. Therefore, only two carefully selected experts from the policy-level were consulted for this classification. These experts are considered able to discuss this topic without fear of consequences.

In addition, this application is limited to Belgium. However this case study has been compared to previous studies on the application of the Trinitarian model of therapeutic security (Crichton, 2009; Kennedy, 2002) and other academic research relevant to the topic (Collins & Davies, 2005), the proposed model for forensic mental health organization needs further international validation. Only with supplementary evidence this model can show its functional relevance.

Conflicts of interest

The authors have no conflicts of interest to report.

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