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Improving collaboration between professionals supporting mentally ill offenders

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ABSTRACT

Purpose

Interprofessional collaboration is necessary when supporting mentally ill offenders but little is understood of these interactions. This paper explores prison officers' perceptions of current and desirable levels of interprofessional collaboration (relational coordination – RC) to understand how collaboration between these systems can be improved.

Approach

Gittell's RC scale was administered to prison officers within the Norwegian prison system (n=160) using an adaptation of the instrument in which actual and desired levels of RC are evaluated. This differentiates between prison officers' expectations of optimum levels of collaboration with other professional groups, dependent on the role function and codependence, versus actual levels of collaboration.

Findings

Prison officers reported different RC levels across professional groups, the lowest being with specialist mental health staff and prison doctors and highest with nurses, social workers and other prison officers. Significant differences between desired and actual RC levels suggest expertise of primary care staff is insufficient, as prison officers request much greater contact with mental health specialists when dealing with the mentally ill offender.

Originality/value

The paper contributes to limited literature on collaborative practice between prison and health care professionals. It questions the advisability of enforcing care pathways that promote the lowest level of effective care in the prison system and suggest ways in which mental health specialists might be better integrated into the prison system. It contributes to the continued

debate on how mental health services should be integrated into the prison system, suggesting that the current import model used in Norway and other countries, may not be conducive to generating the close professional relationships required between mental health and prison staff.

Keywords: mental health, relational coordination

INTRODUCTION

The principles of Risk, Needs and Responsivity (RNR) (Andrews and Bonta, 2010) commonly underpin strategies used by criminal justice systems (CJS) internationally to reduce reoffending rates. This focuses support, interventions and resources on those offenders most likely to reoffend, addressing 8 main reoffending risk factors (including substance misuse, lack of education and homelessness). The mental health of the offender mediates the success with which these risk factors can be managed (Skeem and Peterson, 2011). In providing support to an offender with mental health needs, multiple workers from different health, social care and prison services overlap in their work activity and their common aim to deliver comprehensive, high quality care to the offender (WHO, 2010). Internationally, a common challenge is how best to integrate specialist mental health and general health services into the prison so that services provides continuous and effective care.

Collaboration and integration are related concepts sitting at the ends of the structure versus agency continuum, with models of integration between services facilitating (or constraining) the collaborative behaviour of agents working within these structures (Hean, 2015). Collaboration, for example, may be associated with professionals' perceptions of power differences between professionals from different services, levels of communication between professionals or an organizational culture that encourages or discourages collaborative action (Ødegård, 2006). Integration on the other hand are those structures that create these conditions: models of funding, administration, organisation, service delivery and care within and between differentiated sectors with the ultimate aim of enhancing the quality of care (Kodner and Spreeuwenberg, 2002). Levels of integration between services lie on a continuum from full segregation to full integration, with linkage, coordination and cooperation being intermediate levels between the two extremes. The continuum is not hierarchical and an optimal level of integration between services, will sit somewhere along this continuum dependent on context

(Ahgren and Axelsson, 2005). The levels of integration can coincide with specific integration devices (Lawrence and Lorsch, 1967). For example, at a lesser level of integration, linkage takes place between existing organizational units and relies on timely referral between systems when moving patients to appropriate services. Coordination on the other hand, lies further along the integration continuum and is linked to the presence of chains of care or clinical pathways. Cooperation may involve defined network managers linking the work of independent units at a systems level (Ahgren and Axelsson, 2005; Hean, 2015).

Theoretically, the concept of Relational Coordination (RC) offers a pragmatic, operational and bidimensional view of both collaboration and integration. It combines the structural dimension of task *coordination* with the *relational* dimension associated with positive interprofessional relationships (Gittell, 2011). The coordination dimension is operationalised as high-quality communication between different professionals (communication that is frequent, accurate, timely and leads to problem solving). The coordination dimension is influenced by (and has an influence on) relations between professionals, the quality of which is assessed in terms of their shared goals, shared/common knowledge of each other's roles, and mutual respect (Gittell, 2011).

Although the longer term impact of collaborative practice on the general population's health and the quality of care and service user experiences is difficult to establish (Brandt et al., 2014), improving collaborative practice, as a focus of organisational quality improvement, has been linked to positive service user outcomes including reduced length of patient hospital stay, lower service costs, improvement in the way drugs are prescribed and increased audit activity (Zwarenstein et al., 2009). In fact, the space between different groups of collaborator, demarcated by professional, departmental or organisational boundaries, is described as potentially a highly productive area where a diversity of ideas meet and generate socially innovative solutions to practice problems (Vangen and Huxham, 2013; Akkerman and Bakker, 2011). Efforts to improve this area across public services is reflected in current EU and

international policy (Department of Health, 2010, WHO, 2015,Departement i Helse og Omsorg, 2013; Kodner and Spreeuwenberg, 2002). But to date, these efforts have largely bypassed forensic mental health and offender rehabilitation environments, failing to contribute meaningfully to the challenges facing mental health provision within the prison system. The nature of collaboration between prison officers and health care professionals is particularly neglected (Brooker et al., 2009), of concern as prison officers can be key observers and gatekeepers to mental health care (Wright et al., 2014), central by virtue of their close working relationships with the offender.

This paper contributes to this limited literature on collaborative practice in the forensic mental health context by exploring relational coordination between prison officers and a range of general health and specialist mental health providers. It aims specifically to identify levels of relational coordination as reported by prison officers when describing their collaborations with other professional groups who offer mental health support to the prison service. The paper offers an international perspective on these collaborations by exploring the viewpoint of Norwegian prison officers in particular. Norway has a small prison population (3874 prisoners, 74 per 100 000 of the population, if compared to 146 per 100 000 in UK and 693 in the US (Institute of Criminal Policy Research, 2017). Reoffending rates are amongst the lowest in world (Fazel and Wolf, 2015) but despite this around 20% of offenders are still likely to receive a new conviction within two years (Kristoffersen, 2013). There is a strong emphasis on offender rehabilitation as a means of reducing reoffending rates in this national context. This is illustrated by a reintegration guarantee (Sverdrup, 2013; Armstrong, 2012) (that lays down in legislation that all offenders have the right to housing, a means of living etc. when they reenter society), as well as the recent introduction of so called *return coordinators* whose task it is to coordinate activities of community services with the prison service when offenders are preparing for and are released (Sverdrup, 2013) . The comparatively low reoffending rates and strong emphasis on offender rehabilitation as a means of reducing reoffending rates, means the Norwegian context is a useful one in which to explore interprofessional collaborative working.

This was the subject of a mixed methods Marie Curie Fellowship project(FP7 628010) (http://cordis.europa.eu/project/rcn/188119en.html). A component of this quantitative arm is reported in this paper.

The reported levels of mental disorder in the Norwegian prison population are similar to international levels with only 8% of prisoners thought to have no mental illness while 73% are diagnosed with a personality disorder, 28.7% have alcohol abuse issues, 51.3% drug abuse issues, 42% suffer from anxiety, 23% a mood disorder, 18% have ADHD, 3,3% psychosis and 12% are at risk of suicide (Health South East, 2014). Although different methods of assessing mental illness differ, making comparison difficult, these rates appear similar, if not slightly more acute, if compared to international surveys of prisoner mental health that estimate 3.7% of prisoners suffer from psychosis and 47% from personality disorder, for example (Fazel & Danesh 2002).

As is the case internationally, there is ongoing concern that mental health care is not adequate within the prison system (Department of Health and International Centre of Prison Studies, 2004). Collaboration between the MHS and CS as separate organisations is hence viewed as important in this environment. Service provision is based on a so-called import model where general health care in the prison is the responsibility of the municipality in which the prison is located. Nurses and prison doctors employed by the local municipalities (public sector) deliver services in prison on a part or full time basis, serving as a first port of call for offenders with mental health issues. Specialist care, including mental health services, is the responsibility of hospitals and specialist services controlled by one of the 5 health regions in Norway. Mental health professionals, employed by public sector specialised mental health services in regional hospitals, are also deployed within the prison offering mental health and substance misuse services to offenders. Specialist and generalist professionals enter the prison on a part time basis to deliver services but the decentralization of health care in the way described means that there is high variability in the type of professional entering the prison and the periods of time

they work there. Health care is not 24 hours and prisoners may be transported out of the prison or be seen by emergency services if incidents occur outside of service hours. This has resource implications for the prisons needing to free staff to make these visits. Social workers and prison officers are employed by the state run prison services

Different services (and different professionals within the same service) may vary in the optimum levels of integration required with the prison service and the need for collaboration with the prison officer. This will be dependent on their role, function and need to work together. For this reason this paper differentiates between actual and desired levels of relational coordination, actual RC being the current status quo and desired levels of RC being a measure of what the prison officer believes the optimum level of collaboration with a specified other professional to be. By exploring the gaps between actual and desired levels of collaboration between prison officers and professionals from other services, professionals' perspectives on the codependence of their role with other groups is established along with their satisfaction with the current collaborative practice and levels of integration. If differences between desired and actual levels of RC are significant, then there is room for improvement in organisational structures that promote relations and the coordination of tasks between prison officers and other groups working with the mentally ill offender.

METHOD

Correctional services in Norway are divided into 5 administrative regions. All 5 were approached to participate in the study. Taking all the divisions of each area prison as one institution, this represented a potential of 37 prisons and 8 halfway houses. Permission to access prison officers was granted by 4 of the 5 regions. Within these 4 regions, 13 prisons agreed to participate in the study. Based on estimates of the number of prisons officers given by key contacts in each prison, a total of 733 questionnaires measuring relational coordination were administered by key gatekeepers volunteered by each prison. The distribution of participating prisons by region and security level can be seen in Table 1. Table 2 summarises

the distribution of participating prison officers and associated response rates.

TABLE 1 and TABLE 2 HERE

Of the 160 prison officers in the sample, 90 (56.3%; n=160) were male. Participants ranged in work experience from a few months (0.17years) to 39 years with an average of 13.4 years (SD =10.0; n=159). No demographic data on those who did not respond to the survey was available. However, around 40% of the around 3248 prison officers in prisons and probation across Norway are female, so women are slightly overrepresented in the sample (Kristofferesen2013).

Relational Coordination

The relational coordination scale score was made up of an unweighted sum of 7 items, each item measured on a 5 point Likert scale. A separate scale score was calculated for relational coordination with each named professional group. This Relational coordination scale was adapted, translated and back translated from English to Norwegian and validated in the forensic mental health context in Norway from the scale developed by Gitell (Gittell, 2011) (see Table 3). Three of the items measured the frequency and quality of communication. The remaining four items related to the strength of relations between professionals.

Participants were asked to rate their levels of relational coordination with the following professionals: Psychiatrists working in specialised mental health services; Psychiatrists working in specialist services for drug treatment; Psychologists working in specialised mental health services; Psychologists working in specialist services for drug treatment: Prison nurses; Prison doctors; Prison social workers and other prison officers. These professions were identified in a qualitative phase of the wider study (http://cordis.europa.eu/project/rcn/188119en.html) as particularly relevant to collaborative working within correctional services, particularly because of the high levels of mental health and substance misuse issues in the prison population. This list was reworked to differentiate between specialist mental health professionals as a result of the

validation of the instrument with key service stakeholders. This validation was undertaken by a review of the instrument by a panel of 5 representing national, subject and methodological expertise. Three of the panel were researchers from academic institutions, 2 of whom were trained social workers, the other a psychologist. Two members of the panel worked in the criminal justice systems, one as a probation officer and the other as an organizational leader. Both of the latter were social workers by background. This panel suggested the differentiation of psychologists and psychiatrists in the scale as well as differentiation between mental health specialists working in drugs versus mental health services. The underlying structure of the scale and its two subscales remained the same as that proposed by Gittell (2011) but the main adjustments related to language and what was understood by native Norwegian speakers. For example in original items it was asked whether participants received accurate information from other professional groups. This was not understood by native Norwegian speakers and hence the item was changed to: How often do you get relevant feedback about the needs of an offender from these professionals?

The most significant change to the RC instrument was the addition of the desired level of coordination scale in addition to the estimates of actual coordination in the original Gittell scale. Different levels of integration may be required between the different services and professionals dependent on task and responsibility(Ahgren and Axelsson, 2005). Therefore each of the original Gittell scale items was matched with an item questioning the degree to which each of the dimensions of relational coordination was seen by prison officers as actually necessary. The internal consistency of the 7 item scale measuring relational coordination with each professional group ranged from 0.89 to 0.94 and the internal consistency of the 7 item scale measuring desired relational coordination ranged from 0.84 to 0.88.

Descriptive statistics for individual items, for each relational and coordination dimension as well as the overall relational coordination score with each professional group are presented.

The differences between actual and desired scores are analysed using non parametric means, specifically Wilcoxon signed rank test for related samples. Differences between reported relational coordination with different professional groups were analysed using Friedman's Two way analysis of variance.

Ethical clearance for this and all work packages of the project was obtained from the Privacy Ombudsman for research, the Norwegian social science data service (NSD) (Ref nr: 39534) and separately from the Director of the Criminal Justice region being investigated (Vår ref: 201313560-5).

RESULTS

Actual Levels of Relational Coordination

Prison officers report different levels of the coordination dimension with different professional groups within the prison ($F=605.319$; d.f. $=7$; $p<0.001$). They reported communicating most frequently with nurses, social workers and other prison officers, that communication is most timely with these groups and that they receive the most relevant feedback about the needs of the offender from these professions (See Table 3).

Similarly, there is a significant difference in the quality of relations held with the different professions ($F=629.631$; d.f.$=7$; $p<0.001$). Prison officers report sharing responsibilities for the care of the offender most with fellow prison officers, prison social workers and nurses, that these three groups have the most knowledge of what their job covers, that they feel most respected by these groups and feel themselves to share common work priorities.

Taking these two dimensions together, there are significant differences between relational coordination as an overall score by professional group (Friedman's statistic: 547.548, df=7; $p<0.0005$) (Table 3). Relational coordination is best with other prison officers ($M=4.3$), social

workers (M=3.7) and nurses (M=3.6) and least with psychiatrists in mental (M=1.9) and drug services (M=1.8) (Table 3).

Desired levels of Relational Coordination

A similar pattern is observed when exploring desired levels of relational coordination (Table 3). Prison officers believe that different levels of coordination ($F=445.665$; d.f. =7; $p<0.001$), relations ($F=479.154$; d.f. =7; $p<0.001$) and relational coordination as a whole ($F=433.372$; d.f. =7; $p<0.001$) is required between prison officers and each of the professional group (See Table 3). They see relational coordination as most desirable with other prison officers (M=4.4), social workers (M=4.1) and nurses (M=4.0) and least required with psychiatrists in mental (M=3.2) and drug services (M=3.2).

However, although lesser relational coordination may be required with specialist mental health specialists, there are still significant differences between observed and desired levels of relational coordination, across all the professions. So, although relational coordination is most desirable with nurses, other prison officers and social workers when prison officers need to find support to manage a mentally ill offender, greater levels of relational coordination is still required across all groups with the greatest gaps between actual and desired levels of relational coordination being reported for psychiatrists and psychologists from both health and drugs services (Table 3 and Table 4).

TABLE 3 AND TABLE 4 HERE

DISCUSSION

This study shows that in the Norwegian context, prison officers, when addressing the needs of the offenders in their care, report the highest levels of relational coordination with nurses, social workers and other prison officers, suggesting these are the professions they interact with most and feel most comfortable approaching when they need support managing the mental health of

an offender. The lowest levels of relational coordination are reported between prison officers and specialist mental health services (psychologists and psychiatrists) and are low with the prison doctor also. At face value, this may reflect differing levels of overlap and codependence of role and function between prison officers and these other professional groups. Prison officers, nursing staff and social workers for example spend more time in the prison, with greater contact with, and responsibility for the everyday care of the offender. Higher levels of RC may therefore required between prison officers and these professions than between prison officers and specialist staff. However, the significant differences between actual and desired levels of RC between prison officers and all professions, but especially between prison officers and specialist mental health staff, suggest that although optimum RC levels can be expected to be different based on work role of the different groups, the optimum levels have not been reached and especially not with specialist mental health staff.

Findings of a qualitative phase of the current research study, explored collaborative working between the MHS and CS in greater depth albeit from the perspective of managers and leaders, and offered some suggestions for this gap between actual and desired RC. Logistical limitations such as differing working schedules between prison officers and health professionals, limited resources meaning health professionals may not be able to come to prisons as often as desirable and poor attitudes towards working with the offender population, were some of the barriers that emerged as possible reasons for less than optimum levels of RC between prison officers and other professions. Further a lack of shared understanding of the information about a prisoner that can or cannot be shared between professionals is a key constraint to communication between the MHS and CS (Hean et al., 2016b, 2016c). It remains to be seen if front line professionals share these managerial views and whether there are professional differences in these views. For example, do prison officers feel able to share more information with burses than psychiatrists? How are professional codes of professional confidentiality understood by different professions? With which professions do prison officers feel able to share confidential information and why? Will they share information with professions with whom

their RC is higher or is the reverse true? These are questions to be addressed in future studies.

Whatever the reasons for the gaps between actual and desired RC, however, current low levels of relational coordination between prison officers and specialist mental health staff may mean that mental health specialists lose key opportunities for access, diagnosis and effective treatment of the offender and similarly, prison officers lose the benefit of specialist knowledge offered by mental health experts for dealing with the mentally ill offender on a daily basis. Opportunities to work together to develop services innovatively from the ground up are also lost.

Differences in reported levels of RC may be linked to potential power differentials between professional groups, prison officers seeing nurses and social workers as more approachable and doctors and mental health specialists as less so. The priorities and values of these groups may also be different, meaning that contact between these professionals does not flow organically. It has also been suggested elsewhere that collaboration is most required in times of crisis (Bond and Gittell, 2010). The high levels of mental illness in Norway, and the high levels of desired relational coordination with specialist mental health specialists, would suggest that prison officers are reaching a point of crisis in dealing with offenders' mental health and are actively seeking out not only primary care support but support from mental health specialists as well to address this.

Alternatively, low levels of RC may be systemic, linked to current models of integration between prison and mental health service and the differing amounts of time that these professions are physically located within Norwegian prisons. Although this varies from prison to prison, social workers (employed by the prison) and nurses (employed by the municipality) are more likely to be work for longer periods in the prison, whereas doctors (employed by municipalities) and mental health specialist (employed regionally) visit the prison less frequently or, in some cases, not at all. Lower levels of relational coordination between prison officers and these professions

may therefore simply be a lack of direct contact between these groups. A review of literature in prison health care (Brooker et al., 2009), however, highlighted the fact that, even with mental health services based permanently within the prison, the two cultures can run quite distinctly from each other, formal lines of communication embedded in the prison and in mental health services encouraging intra service referral but not interagency interactions (Wolff, 2002a). Further, although, clear care pathways are not articulated within the Norwegian system in this context, there is compliance with principles of lowest least level of effective care and prison officers may be expected formally or informally to refer offenders' mental health or related issues to the nurse or social worker in the first instance as the most economically and diagnostically efficient means of referral. Although the findings of our study suggest prison officers see coordination and good relations with nurses and social works as of most importance, they also believe that better relational coordination between themselves and doctors and mental health specialists is still required. This desire for greater contact with mental health specialists, reflects studies elsewhere where prison officers are shown to bypass primary care services and approach specialists directly (Wright et al., 2014). There is a need to explore why prison officers have reported these levels of relational coordination and why they require greater relational coordination with specialist mental health workers and the prison doctor: if they feel that relations with any group could always be improved or if there is a genuine need for greater contact with specialist service providers and why.

Integration of health and prison services has been on international agendas for many decades (Wolff, 2002a) but despite this services remain fragmented. The lack of coordination reported by prison officers with specialist mental health services in this study confirms this is true in the Norwegian context also. The import model used in Norway is one approach to the integration between services for the social good, but the internal costs of working in this way (e.g. loss of resource or professional autonomy) may be too great for prison officers and mental health specialists to work together in any meaningful way. Ways need to be found in which the real and tangible costs of collaboration and integration can be minimized in favour of promoting the

more nebulous concept of social good and benefits of collaboration (Wolff, 2002a).

High levels of RC with nurses, social workers and other prison officers in this study highlights the importance of prison nurses and social workers as gatekeepers in information flow between the prison officer and mental health providers. Training in conflict resolution, mental health and collaborative working may hence be particularly useful if directed at nurses and social workers working in prisons. As the first port of call for the prison officer, these professionals may require increased mental health awareness, assertiveness, leadership, liaison, collaboration and change management skills (Young et al., 2009) that will enable them to work effectively with prison officers, and/or link them to mental health specialists, with whom they currently have little contact. It is important at this juncture to differentiate between training in which mental health care is taught to prison officers/nurses etc by mental health specialists and training which teaches professionals to be able to work together to create joint solutions. Both are necessary but seek different things but are sometimes conflated.

Training should be specialist for the forensic environment however, as a global review of nurses working in prison environments (Kettles, Peternelj-Taylor & Robinson, 2001) suggested that prison mental health nurse's role is qualitatively different from that of the more general mental health nurse due the complex nature of the client group and the prison. Training for prison officers is also required, not only to prepare them for a greater role in the observation, monitoring and support of mental health offenders (Brooker et al., 2009, Bradley 2009) but that that they, together with health professionals, learn from and about each other (Hean et al., 2016a) developing collaboration and integration competencies, required for leaders and front line staff to be collaborative and work within integrated services (Hean, 2015). The same applies for professionals such as psychologists and psychiatrists where experience and preparation for working with offenders has also been shown to be limited (Brooker et al., 2009). The need for training of this form is confirmed by those recommending action learning sets as a means of enhancing interprofessional working (Walsh, 2009). As prison officers report wanting better

contact with specialist mental health services, these action learning sets, or other interventions to enhance collaboration, could therefore also include specialist mental health professionals in their participants, in addition to the prison nurses and prison officers currently engaged in these activities (23). Similarly, a recently EU funded Project COLAB (2017-2021) (Horizon 2020 RISE Project COLAB (2017-2021) Project nr 734536), explores the potential of change laboratories, a Finnish tool in work force development, in which prison officers, specialist mental health specialists and offenders work together to develop innovative solutions to practice challenges.

Both action sets and change laboratories are joint ventures, based on greater levels of integration (cooperation) rather than current referral systems and informal care pathways (linkage and coordination) over which each service has partial control, pooling together their resources and interests (Wolff, 2002b). Although they offer higher integration potential, and focus on specific practice challenges, they may be costly not only in terms of loss of resources and control, but they can be challenging for participants, time intensive and unstable if partners lack commitment and mutual trust (Wolff, 2002b). The COLAB project explores these challenges.

Alternatively, greater integration could be achieved by network managers dedicated to facilitating interactions between specialist staff and prison officers, a move from a linkage/coordination level of integration to a more cooperative model of integration. Similarly, the role of the existing coordinator posts (e.g. the return coordinator in Norway) could be extended to include the facilitation of mental health/prison service interactions during the offender's sentence period as well as during and on release.

Studies in relational coordination in general have suggested a relationship between other specified organization structures and subsequent levels of relational coordination (Gittell, 2011). These structures include the organization of formal, facilitated interagency meetings, explicit models for handling interprofessional and interagency conflicts and developing a culture

of collaboration through measures such as explicitly recruiting staff open to improving interagency collaboration, introducing tangible funding incentives associated with effective collaborations and holding managers accountable to demonstrate that collaboration is actively taken. Prisons could also ensure that they regularly have a mental health specialist attending in all prison, for longer periods of time and/or explore the benefits of mental health specialists being dedicated to the prison population alone and on a more full time basis. This increase in time spent in the prison would make contact (either formal or informal) between prison officers and specialists more likely. It is also more likely to increase health care usage amongst the offenders themselves as well in the longer term as demonstrated in previous surveys of Norwegian prison health care where higher health staffing levels were shown to increase offender usage of health care (Nesset et al., 2011). There is potential also for consideration of joint funding streams, although internal competition and differing priorities has meant joint funding streams have not always been successful (Wolff, 2002a). At the same time, some of the logistical costs of collaboration (e.g. differing working shifts/schedules of prison officers and health staff, limited resources and the distance of the prison from specialist services) need to be addressed if the gap between actual and optimum levels of relational coordination between prison officers and specialist staff is to be improved (Hean et al., 2016 b,c; Wolff, 2002b). Constant monitoring and evaluation of the levels of RC between organisations and professional groups is important to sustain these improvements. The application of the RC tool at regular intervals, including an analysis of actual versus desired levels of RC, will help inform managers of the levels of RC their employees see as necessary if compared to the current status quo.

In drawing conclusions from the study, the following caveats should be acknowledged: the representativeness of the sample is limited, due to a low response rate. Although this is to be expected in any cross sectional survey (Oppenheim, 1992), it may be specifically challenging in a high security and highly pressurized, where researcher access is often limited or constrained. This raises questions on how best to improve the quality of research working within these environments. Further, the study only explored the perspectives of prison officers. There is no

guarantee that other professionals shared the same perspective of these relations. Further study is required to test the generalizability of these findings on relational coordination in other national contexts and the degree to which prison officers' perspectives on the need for greater relational coordination is shared by other professional groups. We agree with the Brooker and colleagues (Brooker et al., 2009) of the need to review the effectiveness of current models of mental health care provision within the prison system, in our case in the Norwegian context.

CONCLUSION

Prison officers report, when working on supporting the needs of mentally ill offenders, low levels of relational coordination with specialist mental health services and prison doctors. On the other hand, relational coordination is high with nurses, social workers and other prison officers suggesting it is to these professionals prison officers will turn when needing help managing and supporting a mentally ill offender. Although they see these front line or generalist professionals as being a priority resource for the prison officer, there is a need to better understand when primary care is the most efficient group for the prison officer to contact and when they require specialist input. Differences in desired and actual relational coordination suggests that the current manner in which the import model is used in Norway and other countries, to deliver specialized mental health care to offenders, may not be conducive to generating the close professional relationships required between the specialist mental health and prison staff for effective offender care. Future research should be directed at exploring the reasons behind current levels of limited relational coordination, ways to improve this between prison officer and mental health specialists and the impact on organisational and offender outcomes that may flow from this.

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Table 1 Prisons participating in survey

Size		Small (0-40 prisoners)	Medium (40-100 prisoners)	Large (101 prisoners and over)
Closed High security	South West	1	1	1
	East	1	1	
	West			1
	South		2	
Low security/Halfway house	South West	1	1	
	East	1		
	West	1	1	
	South	0	0	

Table2: Frequency distribution of participating prison officers by prison and region and response rates

	Frequency	Percentage of final sample	Total prison officers available	Response rate %
SW	73	45.6	214	34.1
W	34	21.3	322	10.6
E	25	15.7	124	20.2
S	28	17.5	73	38.4
Total	**160**	**100.0**	**733**	**21.8**

Table3: Levels of Actual and Desired Relational Coordination

Relational Coordination measure	Psychiatrist in mental health services	Psychiatrist in drugs services	Psychologist in mental health services	Psychologist in drugs services	Nurse	Doctor	Social worker	Other Prison officers	Friedman statistic
How often do the following professionals communicate with you about offenders' needs? (Never/Seldom/Now and then/Often/All the time (scale 1-5)	1.7 (0.8)	1.6 (0.7)	1.9 (0.9)	1.8(1.0)	3.7 (0.7)	2.0 (0.9)	3.7 (1.2)	4.5 (0.7)	;
How often SHOULD the following professionals communicate with you about offenders' needs?	3.2 (0.7)	3.2 (0.8)	3.4 (0.7)	3.4 (0.7)	4.0 (0.8)	3.3 (0.8)	4.0 (0.8)	4.5 (0.7)	
How often do the following professionals communicate with you in a timely way related to the offenders' needs? (Never/ Seldom/Now and then/Often/Always)	1.6 (0.8)	1.5 (0.7)	1.8 (0.9)	1.8 (0.9)	3.4 (1.1)	2.0 (1.0)	3.5 (1.2)	4.1 (0.9)	
How NECESSARY is it that the following professionals communicated with you in a timely way related to the offender's needs?	3.3 (1.0)	3.3 (1.0)	3.4 (0.9)	3.9 (0.9)	3.3 (0.9)	3.4 (1.0)	4.0 (0.9)	4.3 (0.9)	
How often do you get relevant feedback about the needs of an offender from these professionals? (Never/ Seldom/Now and then/Often/Always)	1.8 (1.0)	1.7 (0.9)	2.0 (1.1)	2.0 (1.1)	3.6 (1.1)	2.2 (1.2)	3.6 (1.2)	4.2 (0.8)	
How often is it NECESSARY that you get relevant feedback about the needs of an offender from these professionals?	3.5 (1.0)	3.4 (1.0)	3.6 (0.9)	3.5 (1.0)	4.1 (0.9)	3.6 (1.1)	4.1 (0.9)	4.4 (0.7)	
Coordination Dimension	**2.0 (0.9)**	**2.0 (0.9)**	**2.2 (1.0)**	**2.2 (1.0)**	**3.6 (0.8)**	**2.6 (1.0)**	**3.8 (0.8)**	**4.3 (0.7)**	**F=605.319 ; d.f.=7; p<0.001**
Desired coordination dimension	3.3 (0.8)***	3.3. (0.8)***	3.5 (0.7)***	3.4 (0.7)***	4.0 (0.7)***	3.4 (0.8)***	4.1 (0.7)***	4.4 (0.6)	**F+445.665; d.f. =7; p<0.001)**
When you work with other professionals with an offender, do you share responsibility with them in relation to the needs of the offender? (Never/ Seldom/Now and then/Often/Always)	1.8 (1.1)	1.7 (1.0)	1.9 (1.2)	1.9 (1.1)	3.2 (1.2)	2.2 (1.2)	3.4 (1.2)	4.1 (1.0)	
When you work with other professionals with an offender, how often SHOULD you share responsibility with them in relation to the needs of the offender	3.2 (1.1)	3.2 (1.1)	3.3 (1.0)	3.3 (1.1)	3.8 (1.0)	3.4 (1.0)	3.9 (0.9)	4.2 (0.9)	
How much do the following professionals know about you work responsibilities when dealing with an offender's needs? (Nothing/A Little/Some/A Lot/Everything)	2.1 (1.0)	2.0 (1.0)	2.3 (1.0)	2.3 (1.1) 7	3.7 (0.9)	2.7 (1.1)	3.9 (1.0)	4.4 (0.8)	
How much SHOULD professionals know about you work responsibilities when dealing with an offender's needs? (Nothing/A Little/Some/A Lot/Everything)	3.4(0.9)	3.3 (0.9)	3.5 (0.8)	3.5 (0.8)	4.0 (0.7)	3.7(0.8)	4.2 (0.7)	4.5 (0.6)	
Do you feel you are respected by these professionals in your work in supporting offenders needs?(Not at all/A little/Somewhat/A Lot/Completely)	2.2 (1.2)	2.1 (1.2)	2.4 (1,2)	2.4 (1.2)	3.9 (1.0)	2.7 (1.3)	4.0 (0.9)	4.4 (0.7)	
How NECESSARY is it that these professionals respect you in your work in supporting offenders needs?(Not at all/A little/Somewhat/A Lot/Completely)	3.4 (1.1)	3.3 (1.1)	3.5 (1.0)	3.5 (1.0)	4.1 (0.8)	3.7 (1.0)	4.3 (0.7)	4.5 (0.7)	

To what degree do you think these professionals share the same priorities as you in relation to your work with supporting offenders; needs? (Not at all/A little/Somewhat/A Lot/Completely)	2.1 (1.1)	2.0 (1.1)	2.3 (1.2)	2.3(1.1)	3.5 (1.0)	2.6 (1.2)	3.7 (1.0)	4.1 (0.8)	
To what degree do you think these professionals SHOULD share the same priorities as you in relation to your work with supporting offenders; needs? (Not at all/A little/Somewhat/A Lot/Completely)	3.2 (1.1)	3.4 (1.0)	3.3 (1.0)	3.3 (1.0)	3.8 (0.8)	3.5 (0.9)	4.0 (0.8)	4.2 (0.7)	
Relational dimension	1.7 (0.8) ***	1.6 (0.7) ***	1.9 (0.9) ***	1.9 (0.9) ***	3.6 (1.0) ***	2.1 (1.0))***	3.6 *** (1.2)	4.2 (0.7)	F=629.631; d.f. =7; p<0.001)
Desired Relational dimension	3.3 (0.8)	3.3 (0.8)	3.4 (0.8)	3.4 (0.8)	4.0 (0.6)	3.6 (0.8	4.1 (0.6)	4.3 (0.6)	F=479.154; d.f.=7; p<0.001
Overall Relational coordination score (actual)	**1.9 (0.8)****	**1.8 (0.7)****	**2.1 (0.9)****	**2.1 (0.9)****	**3.6 (0.9)****	**2.4 (0.9)****	**3.7 (0.9)****	**4.3(0.6)** ***	**F=547.548, df=7; p=0.000**
Overall Relational Coordination score (desirable)	**3.3 (0.7)**	**3.3 (0.8)**	**3.4 (0.7**	**3.4 (0.7)**	**4.0 (0.6)**	**3.5 (0.7)**	**4.1 (0.6)**	**4.4 (0.5)**	**F= 433.372, df=7; n=98 p=0.000**

***** significant difference on Wilcoxon signed rank test for related samples between actual and desired reports of RC and dimensions of RC at P<0.001level**
**** significant difference on Wilcoxon signed rank test for related samples between actual and desired reports of RC and dimensions of RC at P<0.01 level**
***significant difference on Wilcoxon signed rank test for related samples between actual and desired reports of RC and dimensions of RC at P<0.05 level**

Table 4: Differences between actual and desirable levels of relational coordination

Profession	Mean Difference in Mean RC Scores	Wilcoxon signed rank test for related samples
Psychiatrist in mental health services	1.4	WSR=5868.500; n=113; p<0.005
Psychiatrist in drugs services	1,4	WSR=5877.500; n=112; p<0.005
Psychologist in mental health services	1.3	WSR=6188.00; n=116; p<0.005
Psychologist in drugs services	1.3	WSR=5433.500; n=108; p<0.005
Doctor	1.1	WSR=4976.000; n=106; p<0.005
Nurse	0.4	WSR=558.000; n=116; p<0.005
Social worker	0.3	WSR=1000.000; n=121; p<0.005
Other prison officers	0.1	WSR= 3121.500; n=127; p<0.005