Scandinavian Journal of
Caring Sciences

EMPIRICAL STUDIES

doi: 10.1111/scs.12431

The importance of person-centred care and co-creation of care for the well-being and job satisfaction of professionals working with people with intellectual disabilities

Leontine van der Meer (iBMG), **Anna Petra Nieboer** PhD (iBMG), **Harry Finkenflügel** PhD (iBMG) and **Jane Murray Cramm** PhD (iBMG)

Department of Health Policy & Management (iBMG), Erasmus University Rotterdam, Rotterdam, The Netherlands

Scand J Caring Sci; 2018; 32; 76–81

The importance of person-centred care and co-creation of care for the well-being and job satisfaction of professionals working with people with intellectual disabilities

Background: Person-centred care and co-creation of care (productive interactions between clients and professionals) are expected to lead to better outcomes for clients. Professionals play a prominent role in the care of people with intellectual disabilities at residential care facilities. Thus, person-centred care and co-creation of care may be argued to lead to better outcomes for professionals as well. This study aimed to identify relationships of person-centred care and co-creation of care with the well-being and job satisfaction of professionals working with people with intellectual disabilities (PWID).
Methods: A cross-sectional survey was conducted in 2015 among professionals working at a disability care organisation in the Netherlands. All 1146 professionals involved in the care of people with intellectual disabilities who required 24-hours care were invited to participate. The response rate was 41% (n = 466).
Results: Most respondents (87%) were female, and the mean age was 42.8 ± 11.5 years (22–65). The majority of respondents (70%) worked ≥22 hours per week and had worked for the organisation for ≥5 years (88%). Most of the respondents (76.8%) were direct care workers either in residential homes (59.3%) or in day activities (17.5%). After controlling for background variables, person-centred care and co-creation of care were associated positively with job satisfaction and well-being of professionals.
Conclusions: The provision of person-centred care and co-creation of care may lead to better well-being and job satisfaction among professionals working with PWID. This finding is important, as such professionals often experience significant levels of work stress and burnout.

Keywords: person-centred care, co-creation of care, intellectual disability, job satisfaction, well-being, professional.

Submitted 2 June 2016, Accepted 15 December 2016

Introduction

Increasing attention is being paid to job satisfaction and the well-being of staff working with people with intellectual disabilities. Job satisfaction is often defined as the degree to which individuals feel positive or negative about their jobs (1). As such job satisfaction represents a healthcare worker's attitude or emotional response (positive or negative) to one's tasks as well as to the physical and social conditions of the workplace. Job satisfaction leads to either positive or negative employment relationships, which in turn affects job performance (2). Professionals delivering care to people with intellectual disabilities often experience high levels of burden when working with this population, which may thus result in work stress in 25–32% of staff members (3) and even burnout (4). This stress negatively affects the well-being of professionals, and it may threaten the continuity of care and cause problems with staffing levels due to high absenteeism rates and intention to leave the job. Moreover, clients are faced with changes in staff teams, and the safety of clients and workers can be affected. Thus, staff members' satisfaction with their jobs and the protection of their well-being are important (5).

One factor leading to increased work stress and a greater risk of burnout among staff working with people with intellectual disabilities is clients' limitations in

Correspondence to:
Jane Murray Cramm, Erasmus University (iBMG), Burgemeester Oudlaan 50, 3062 PA Rotterdam, The Netherlands.
E-mail: cramm@bmg.eur.nl

© 2017 The Authors.
Scandinavian Journal of Caring Sciences published by John Wiley & Sons Ltd on behalf of Nordic College of Caring Science.
This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

signalling and communicating their emotional responses and needs. Staff members face the challenging task of interpreting clients' behaviours as signs, and these behaviours may be challenging. This factor makes the development of high-quality personal relationships between professionals and clients difficult (6, 7). As professionals often become personally attached to clients with intellectual disabilities (8), they experience stress when they are not succeeding in the establishment of productive interactions with their clients (9, 10). The establishment of co-creation of care has been shown to contribute to the reduction in work stress and depression among staff working with people with intellectual disabilities (11).

Organisations can be obstructive or supportive in efforts to achieve person-centred care (12–14). Eight dimensions that are important for person-centred care have been described: (i) respect for clients' values, preferences and expressed needs; (ii) provision of information and education; (iii) access to care; (iv) emotional support; (v) involvement of family and friends; (vi) continuity and secure transition of care; (vii) physical comfort; and (viii) co-ordination of care (12–15). The quality of preconditions for the co-creation of care (productive interactions between clients and professionals) is linked positively to an organisation's performance in these eight dimensions. In other words, organisation who do well on the eight dimensions of person-centred care lead to more productive interactions between clients and healthcare professionals. Staff must continuously address the support needs of clients with intellectual disabilities to establish co-creation of care. Every day, staff members should ask themselves whether the support they are offering is what a client really wants, which is reflected mainly in the client's communication or behaviour. The client's behaviour can indicate that the (assumed) demand has been met, but clients can also respond very passively or with much excitement and action, or not react at all. Thus, intensive interaction with a client is necessary to respond in a timely and appropriate manner if the client reacts differently than expected. Therefore, co-creation of care is characterised by accurate, frequent and problem-solving communication that is supported by relationships based on shared goals and mutual respect (16). Joint decision-making and responsibility taking are achieved through open communication, co-operation and respect for each other, with negotiation of treatment options to accomplish mutually defined goals (17).

Consideration of clients' preferences and needs is not the only factor that contributes to co-creation of care, co-ordination of care and safeguarding of the continuity of care also play important roles. Behavioural experts must be involved, for example to help determine the causes of changes in clients' behaviour, which may be challenging when clients have difficulty expressing their support needs. The provision of person-centred care thus requires good transfer of care and close interdisciplinary co-operation among engaged staff members (18). When staff members know that they can trust each other and serve as sounding boards for each other when problems arise, and when transfer is well organised, depression and work stress among staff members are reduced (3, 4, 19). Co-creation of care is thus expected to contribute to job satisfaction and the well-being of professionals who care for people with intellectual disabilities. This study aimed to identify the relationships among person-centred care, co-creation of care and outcomes (i.e. job satisfaction and well-being) among professionals working with people with intellectual disabilities. The importance of person-centred care and co-creation of care for professional outcomes (well-being and job satisfaction) has not been studied in previous research. The insights gained can enable the further development of person-centred care for this population and improve outcomes for professionals.

Methods

A cross-sectional survey was conducted at a residential care facility for people with intellectual disabilities in the eastern part of the Netherlands. The facilities include various forms of 24/7 care and therapy as well as day activity services for over 900 clients in 60+ locations in the service area. More than 900 clients of the centre have profound intellectual disabilities. This study included professionals involved in the care and support of clients with intellectual disabilities who required 24-hours care. Only employees with permanent or temporary contracts for at least 16 hours of work per week, who had worked for the organisation for at least 1 year, were selected to fill in a questionnaire. The director of the residential care facility approved the study and gave permission to send the questionnaires to the selected employees. The questionnaire was sent via mail to 1146 professionals, and the response rate was 41%. Since we investigated professionals only, according to the CCMO, the current study did not fall within the scope of the Medical Research Involving Human Subjects Act and therefore did not have to undergo prior review by an accredited Medical Research and Ethics Committee or the CCMO. All respondents were informed about the aims of the study and its anonymous and voluntary nature, before giving their consent to participate.

Measurement instruments

The *well-being* of professionals was measured using the 15-item version of the Social Production Function Instrument for the Level of Well-being (20). Professionals were asked to respond to questions about their physical and social well-being by selecting 'never', 'sometimes', 'often'

© 2017 The Authors.

or 'always'. Average scores were calculated if at least 10 out of 15 items were available (ranging from 1 to 4), with higher scores indicating greater well-being. The Cronbach's alpha of this instrument was 0.85, indicating good reliability, in this study.

Job satisfaction was assessed using the 38-item Measurement of Job Satisfaction questionnaire (21). In a systematic review, Van Saane et al. (22) rated this instrument as the most reliable and valid measure of job satisfaction. Possible responses are 'very dissatisfied', 'dissatisfied', 'neutral', 'satisfied' and 'very satisfied'. Mean subscale scores were calculated if at least two of three items were available. In this study, the summary 'general job satisfaction' score was used in analyses (sum of the mean subscale scores – ranging from 5 to 25). Higher mean scores reflect greater job satisfaction. The Cronbach's alpha of this instrument was 0.77, indicating reliability, in this study.

To gain insight into how professionals perceived the quality of *person-centred care*, a 35-item questionnaire based on previous studies of the eight dimensions of person-centred care was used (12, 13). Possible responses are 'never', 'sometimes', 'often', 'very often' and 'always'. Subscale scores for the areas of eight dimensions of person-centred care were derived by calculating the average score for all items in that subsection of items. Mean subscale scores were calculated if at least two of three items were available. Total scale scores were calculated by average scores on the subsections ranging from 1 to 5. Higher mean scores imply better person-centred care. The Cronbach's alpha of this instrument was 0.88, indicating reliability, in this study.

Co-creation of care was assessed using a modified version of the Relational Coordination instrument (17, 23). This six-item questionnaire measures six aspects of communication (frequent, timely and problem-solving) and relationships (based on shared knowledge, goals and mutual respect) between professionals and clients. Responses are structured by a 5-point Likert scale ('never', 'rarely', 'occasionally', 'almost always' and 'always') ranging from 1 to 5. Higher mean scores indicate better co-creation of care. The Cronbach's alpha of this instrument was 0.87, indicating reliability, in this study.

Information on respondents' *background characteristics* (age, gender, position, number of working hours per week and organisational work history) was collected. Organisational work history and working hours per week were converted into dichotomous variables (<5 years vs. ≥5 years and ≤21 hours vs. ≥22 hours, respectively).

Analyses

The SPSS package (IBM 22 Corporation, Armonk, NY, USA) was used to analyse the data. Descriptive analysis of all variables involved the calculation of means, ranges, standard deviations and/or percentages. Pearson correlation analysis was applied to assess bivariate associations of person-centred care and co-creation of care with job satisfaction and well-being. Multiple regression analysis was performed to explore potential predictors for the outcome using listwise deletion of missing cases.

Results

Table 1 summarises the background characteristics of the respondents. Most respondents (87%) were female, and the mean age was 42.8 ± 11.5 years (22–65). The majority of respondents (70%) worked ≥22 hours per week and 88% had been working for ≥5 years in the organisation. Most of the respondents (76.8%) were direct care workers either in residential homes (59.3%) or in day activities (17.5%).

Mean person-centred care score was 4.14 ± 0.41 (1–5), co-creation of care 3.49 ± 0.52 (1–5), job satisfaction 16.46 ± 2.27 (5–25) and well-being 2.87 ± 0.30 (1–4).

Person-centred care and co-creation of care were correlated significantly with respondents' well-being and job satisfaction (all $p \leq 0.001$; Table 2). In addition, a weak negative correlation between female gender and well-being was found ($r = -0.13$, $p = 0.008$); women reported lower levels of well-being than did men. A weak positive correlation was observed between age and job satisfaction ($r = 0.17$, $p \leq 0.001$); older respondents reported greater job satisfaction.

Multiple regression analyses that controlled for background characteristics revealed significant associations between person-centred care, co-creation of care, job satisfaction and well-being (Table 3). The negative association between female gender and well-being ($\beta = -0.15$, $p \leq 0.001$), and the positive association between age and job satisfaction ($\beta = 0.18$, $p \leq 0.001$) remained significant in these analyses.

Discussion

This study demonstrated that person-centred care and co-creation of care are important for job satisfaction and

Table 1 Descriptive statistics of responding professionals (n = 466)

Characteristic	*Mean ± SD (range) or percentage*
Age (years)	42.8 ± 11.5 (22–65)
Gender (female)	87%
Working hours (≥22)	70%
Organisational work history (≥5 years)	88%
Person-centred care	4.14 ± 0.41 (1–5)
Co-creation of care	3.49 ± 0.52 (1–5)
Job satisfaction	16.46 ± 2.27 (5–25)
Well-being	2.87 ± 0.30 (1–4)

© 2017 The Authors.

Table 2 Associations of study variables with job satisfaction and well-being (n = 466)[e]

	Job satisfaction[c]		*Well-being*[d]	
Characteristic	*r*	*p*	*r*	*p*
Age (years)	0.17	≤0.001	0.02	0.750
Gender (female)	−0.09	0.059	−0.13	0.008
Working hours (≥22)	−0.07	0.123	0.03	0.473
Organisational work history (≥5 years)	0.08	0.089	0.02	0.708
Person-centred care[a]	0.38	≤0.001	0.29	≤0.001
Co-creation of care[b]	0.25	≤0.001	0.36	≤0.001

[a]Person-centred care was measured via a 35-item questionnaire based on previous studies of the eight dimensions of person-centred care. Responses were structured by a 5-point Likert scale after which mean scores were calculated with higher scores indicating more person-centred care. The Cronbach's alpha of this instrument was 0.88, indicating reliability, in this study.
[b]*Co-creation of care* was assessed using a modified version of the Relational Coordination instrument. Responses were structured by a 5-point Likert scale after which mean scores were calculated with higher scores indicating more co-creation of care. The Cronbach's alpha of this instrument was 0.87, indicating reliability, in this study.
[c]*Job satisfaction* was assessed using the 38-item Measurement of Job Satisfaction questionnaire. Responses were structured by a 5-point Likert scale. In this study, the summary 'general job satisfaction' score was used in analyses, with higher scores indicating greater job satisfaction. The Cronbach's alpha of this instrument was 0.77, indicating reliability, in this study.
[d]*Well-being* of professionals was measured using the 15-item version of the Social Production Function Instrument for the Level of Well-being using a 4-point Likert scale. Average scores were calculated, with higher scores indicating greater well-being. The Cronbach's alpha of this instrument was 0.85, indicating reliability, in this study.
[e]Results are based on correlational analyses.

Table 3 Results of multiple regression analysis of relationships of study variables to job satisfaction and well-being (n = 466)

	Job satisfaction[c]		*Well-being*[d]	
Characteristic	*β (SE)*	*p*	*β (SE)*	*p*
Age (years)	0.18 (0.01)	≤0.001	0.04 (0.00)	0.421
Gender (female)	−0.13 (0.30)	0.004	−0.15 (0.04)	0.001
Working hours (≥22)	−0.10 (0.22)	0.021	−0.03 (0.03)	0.587
Organisational work history (≥5 years)	0.01 (0.32)	0.922	−0.01 (0.04)	0.878
Person-centred care[a]	0.32 (0.22)	≤0.001	0.13 (0.03)	0.013
Co-creation of care[b]	0.13 (0.28)	0.013	0.29 (0.04)	≤0.001

[a]Person-centred care was measured via a 35-item questionnaire based on previous studies of the eight dimensions of person-centred care. Responses were structured by a 5-point Likert scale after which mean scores were calculated with higher scores indicating more person-centred care. The Cronbach's alpha of this instrument was 0.88, indicating reliability, in this study.
[b]*Co-creation of care* was assessed using a modified version of the Relational Coordination instrument. Responses were structured by a 5-point Likert scale after which mean scores were calculated with higher scores indicating more co-creation of care. The Cronbach's alpha of this instrument was 0.87, indicating reliability, in this study.
[c]*Job satisfaction* was assessed using the 38-item Measurement of Job Satisfaction questionnaire. Responses were structured by a 5-point Likert scale. In this study, the summary 'general job satisfaction' score was used in analyses, with higher scores indicating greater job satisfaction. The Cronbach's alpha of this instrument was 0.77, indicating reliability, in this study.
[d]*Well-being* of professionals was measured using the 15-item version of the Social Production Function Instrument for the Level of Well-being using a 4-point Likert scale. Average scores were calculated, with higher scores indicating greater well-being. The Cronbach's alpha of this instrument was 0.85, indicating reliability, in this study.

well-being of professionals working with people with intellectual disabilities. Suggesting that organisation who do well on co-creation of care or the eight dimensions of person-centred care [(i) respect for clients' values, preferences and expressed needs; (ii) provision of information and education; (iii) access to care; (iv) emotional support; (v) involvement of family and friends; (vi) continuity and secure transition of care; (vii) physical comfort; and (viii) co-ordination of care] positively affect job satisfaction and well-being among their employees. These results correspond to those of a systematic review of the effects of person-centred care on well-being and satisfaction with care among patients in hospital and primary care settings (24). The results of this study show that in addition to improved outcomes for clients, person-centred care and co-creation of care also improve professional outcomes (well-being and job satisfaction) in the organisation studied. Avgar et al. (25) and Rathert and May (26) have demonstrated the relationship between person-centred care and job satisfaction previously, but those studies were conducted in hospital settings. Given the fact that healthcare personnel have difficulties in meeting the needs of their clients if their own needs are not met (27), it is of upmost importance to attend to needs of these professionals to improve quality of care (28).

It is the first study to document the importance of co-creation of care for these professional outcomes. The finding that female gender was correlated negatively with well-being is consistent with the results reported by Haile (29), who also described this correlation, especially in organisations in which the majority of employees is female. Co-creation of care and person-centred care did not mediate this negative relationship in this study. In addition, our finding of increased job satisfaction among older professionals compared with younger professionals is consistent with previous findings that older employees in the Netherlands and elsewhere report the highest levels of job satisfaction and are most involved in their work (30).

© 2017 The Authors.

Some limitations of this study should be taken into account when interpreting our findings. First, the questionnaire assessed professionals' perceptions and attitudes; no objective measurement or observation was performed nor did we include outcomes for clients. Second, the study had a cross-sectional design, preventing determination of the causality of the observed relationships. Third, the research was conducted at one organisation providing residential care services. To increase the generalisability of the findings, further research in other residential care facilities for people with intellectual disabilities is needed. Finally, the response rate was 41%, which may indicate selection bias. We do know, however, that the male/female ratio of the total study population was similar to that of all respondents (87 and 86% female, respectively). The distribution of professional functions was also similar in the overall study population and among respondents (support workers, followed by personal support workers and personal support workers for day activities).

Conclusions

Person-centred care and co-creation of care are associated positively with the well-being and job satisfaction of professionals working with people with intellectual disabilities. These findings are of great relevance because these professionals can experience their work as a burden, with high risks of work stress and even burnout. Investment in person-centred care and co-creation of care will likely result not only in greater well-being and satisfaction with care among clients, but also in greater well-being and job satisfaction among professionals. They are thus expected to contribute to the reduction in work stress and prevention of burnout in this professional setting.

Author contribution

LM, HF and JC drafted the design for data gathering. LM gathered the data. LM and JC performed statistical analysis and interpretation of data. LM, JC and AN drafted the manuscript and HF contributed to refinement. All authors have read and approved its final version.

Ethical approval

No ethical approval was needed given the fact we investigated professionals only, not patients.

Funding

There was no funding for the research. We declare no competing interests.

References

1 Schermerhorn JR. *Organizational Behavior*, 7th edn. 2000, Wiley, New York.
2 Bhatnagar K, Srivastava K. Job satisfaction in health-care organizations. *Ind Psychiatry J* 2012; 21: 75–78.
3 Devereux JM, Hastings RP, Noone SJ, Firth A, Totsika V. Social support and coping as mediators or moderators of the impact of work stressors on burnout in intellectual disability support staff. *Res Dev Disabil* 2009; 30: 367–77.
4 Willems APAM, Embregts PJCM, Bosman AMT, Hendriks AHC. The analysis of challenging relations: influences on interactive behaviour of staff towards clients with intellectual disabilities. *J Intellect Disabil Res* 2014; 58: 1072–82.
5 Skirrow P, Hatton C. 'Burnout' amongst direct care workers in services for adults with intellectual disabilities: a systematic review of research findings and initial normative data. *J Appl Res Intellect Disabil* 2007; 20: 131–44.
6 Mansell J, Beadle-Brown J. Person-centred planning or person-centred action? Policy and practice in intellectual disability services. *J Appl Res Intellect Disabil* 2004; 17: 1–9.
7 Schuengel C, Kef S, Damen S, Worm M. 'People who need people': attachment and professional caregiving. *J Intellect Disabil Res* 2010; 54: 38–47.
8 Shaddock AJ, Hill M, van Limbeek CAH. Factors associated with burnout in workers in residential facilities for people with an intellectual disability. *J Intellect Dev Disabil* 1998; 23: 309–19.
9 Hatton C. Staff stress. In: *Psychiatric and Behavioural Disorders in Developmental Disabilities and Mental Retardation* (Bouras N ed.), 1999, Cambridge University Press, Cambridge, UK, 427–38.
10 Ford J, Honnor J. Job satisfaction of community residential staff serving individuals with severe intellectual disabilities. *J Intellect Dev Disabil* 2000; 25: 343–62.
11 Gray-Stanley JA, Muramatsu N, Heller T, Hughes S, Johnson TP, Ramirez-Valles J. Work stress and depression among direct support professionals: the role of work support and locus of control. *J Intellect Disabil Res* 2010; 54: 749–61.
12 Berghout MA, Leensvaart L, van Exel J, Cramm JM. Healthcare professionals' views on patient-centered care in hospitals. *BMC Health Ser Res* 2015; 15: 385.
13 Cramm JM, Leensvaart L, Berghout MA, van Exel J. Exploring views on what is important for patient-centred care in end-stage renal disease using Q methodology. *BMC Nephrol* 2015; 16: 74.
14 Gerteis M, Edgman-Levitan S, Daley J, Delbanco TL. *Through the Patient's Eyes: Understanding and Promoting Patient-Centered Care*. 1993, Jossey-Bass, San Francisco.
15 Gerteis M, Edgman-Levitan S, Walker JD, Stokes DM, Cleary PD, Delbanco TL. What patients really want. *Health Manage Q* 1993; 15: 2–6.
16 Gittell JH. Relationships between service providers and their impact on customers. *J Serv Res* 2002; 4: 299–311.

© 2017 The Authors.
Scandinavian Journal of Caring Sciences published by John Wiley & Sons Ltd on behalf of Nordic College of Caring Science.

17 Cramm JM, Nieboer AP. The importance of productive patient–professional interaction for the well-being of chronically ill patients. *Qual Life Res* 2014; 24: 897–903.

18 Ducharme LJ, Knudsen HK, Roman PM. Emotional exhaustion and turnover intention in human service occupations: the protective role of coworker support. *Sociol Spectr* 2008; 28: 81–104.

19 Hatton C, Emerson E, Rivers M, Mason H, Mason L, Swarbrick R, Kiernan C, Reeves D, Alborz A. Factors associated with staff stress and work satisfaction in services for people with intellectual disability. *J Intellect Disabil Res* 1999; 43: 253–67.

20 Nieboer A, Lindenberg S, Boomsma A, van Bruggen AC. Dimensions of well-being and their measurement: the SPF-IL scale. *Soc Ind Res* 2005; 73: 313–53.

21 Traynor M, Wade B. The development of a measure of job satisfaction for use in monitoring the morale of community nurses in four trusts. *J Adv Nurs* 1993; 18: 127–36.

22 Van Saane N, Sluiter JK, Verbeek JHAM, Frings-Dresen MHW. Reliability and validity of instruments measuring job satisfaction: a systematic review. *Occupation Med* 2003; 53: 191–200.

23 Weinberg DB, Lusenhop RW, Gittell JH, Kautz CM. Coordination between formal providers and informal caregivers. *Health Care Manage Rev* 2007; 32: 140–9.

24 Rathert C, Wyrwich M, Boren S. Patient-centered care and outcomes: a systematic review of the literature. *Med Care Res Rev* 2013; 70: 351–79.

25 Avgar AC, Kolins Givan R, Liu M. Patient-centered but employee delivered: patient care innovation, turnover intentions, and organizational outcomes in hospitals, Cornell University, ILR School. *Ind Labor Relat Rev* 2011; 64: 423–40.

26 Rathert C, May DR. Health care work environments, employee satisfaction, and patient safety: care provider perspectives. *Health Care Manage Rev* 2007; 32: 2–11.

27 Linn LS, Brook RH, Clark VA, Davies AR, Fink A, Kosecoff J. Physician and patient satisfaction as factors related to the organization of internal medicine group practices. *Med Care* 1985; 23: 1171–8.

28 Kivimaki M, Kalimo R, Lindstrom K. Contributors to satisfaction with management in hospital wards. *J Nurs Manag* 1994; 2: 229–34.

29 Haile GA. Unhappy working with men? Workplace gender diversity and job-related well-being in Britain. *Labour Econ* 2012; 19: 329–50.

30 Sarkisian N, Pitt-Catsouphes M, Lee J, Bhate R, Carapinha R, Minnich C. Effects of Country & Age on Work Engagement, Job Satisfaction & Organizational Commitment. The Sloan Center on Aging & Work, 2011.

© 2017 The Authors.
Scandinavian Journal of Caring Sciences published by John Wiley & Sons Ltd on behalf of Nordic College of Caring Science.