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Group Climate and Quality of Life in Long-Term Forensic Care: Do Patients and Staff Agree?

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ABSTRACT: The relationship between quality of life (QoL) and group climate is a complex but crucial topic within forensic psychiatry. The QoL of forensic psychiatric patients is influenced by internal and external factors, with group climate potentially assuming a pivotal role in this process. This study aims to gain insight into the relationship between group climate and QoL in a long-term forensic ward in Belgium. Patients (n = 29) completed the Forensic Inpatient Quality of Life Questionnaire—Short Version (FQL-SV), the Essen Climate Evaluation Schema (EssenCES) and the Group Climate Inventory Revised (GCI-R), staff members (n = 22) completed the FQL-SV and the EssenCES. The agreement between QoL rated by patients and staff, the agreement with the current group climate, and the relationships between QoL and group climate were investigated. Overall, the results indicated a high QoL and a positive group climate. Compared with patients, staff members were assigned significantly lower scores on the QoL scale, but no significant differences were found with regard to group climate. A number of facets of group climate correlated positively with perceived QoL. In conclusion, it seems important for forensic institutions to prioritize a positive and enhanced group climate in long-term forensic wards, given the potential correlation with the QoL of patients.

Keywords: Quality of life; Group climate; Forensic psychiatry; Long-stay; Inpatients

1. Introduction

Forensic psychiatric care facilities in Belgium typically house individuals subjected to an internment measure. According to Belgian legislation, a person who is considered to have no or diminished responsibility for the committed crime due to the presence of severe psychopathology may be subjected to an internment measure [1,2] and treated before reentering into society. During the last decade, the Belgian government has invested in forensic mental health to create more tailor-made care [3]. Despite this growth in tailor-made treatment options, some patients remain at risk of recidivism [1,4]. These patients are in need of specific psychiatric wards focusing on long-term care. The aim of these long-term forensic mental health care wards is neither treatment and rehabilitation, nor the search for possibilities in terms of freedoms. Instead, these units aim to create a living environment where the emphasis is on patients' satisfaction, quality of life (QoL), participation and co-determination according to one's capacities while also still considering the security of the patients themselves as well as society [5,6]. This artificial environment tries to imitate a 'normal' environment as much as possible [7]. Most patients in these facilities stay indefinitely, sometimes for the rest of their lives, making QoL and group climate important and unique areas to focus on from a humanitarian perspective [6]. The relationship between QoL and group climate in a long-term forensic mental health care facility can be complex and multifaceted [4,8,9]. The forced context in which forensic psychiatric patients reside and the indefinite/uncertain nature of their stay in the ward may cause frustration and resistance to the system, which could be reflected in a general negativity towards everything that does not necessarily correspond to reality and, can in turn lower perceptions of group climate and QoL [10].

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QoL refers to an individual's overall well-being and satisfaction with various aspects of life [11]. It encompasses objective indicators (e.g., the absence of illnesses) as well as subjective evaluations of physical (e.g., beautiful surroundings), mental (e.g., having peace of mind), and social (e.g., experiencing support from friends) dimensions [12]. In forensic psychiatry, QoL is influenced by many factors, with group climate potentially playing a central role [6,13].

Group climate can be defined as the social and relational dynamics within a group [14]. For several decades, researchers have argued that group climate in residential care is one of the most important conditions to be fulfilled for high-quality care. Consequently, high QoL, and thus is of utmost importance [15–17]. Group climate can be perceived as open (positive and therapeutic) or closed (negative and repressive) by the group members [18]. An open climate is characterized by communication and contact with staff members (*i.e.*, responsivity), learning opportunities, structure, safety and positive connections with others, with the least repression possible [19]. On top of that, an open climate can result in increased treatment engagement and more positive treatment outcomes. These outcomes include increased empathy, reduced criminal cognitions, fewer personality problems, and greater emotional stability in patients [20,21]. It has also been suggested that an open climate may result in a decrease in aggressive incidents on the ward [22]. A closed climate, on the other hand, may arise when there is only little support from staff members, when growth is nearly impossible, when the atmosphere on the ward is perceived as cold, and when staff members mainly use repression and punishment as treatment strategies [23]. There is an imbalance of power and a lack of mutual respect [21,23]. Residents have the feeling of being treated unfairly and as if they are being oppressed and not being offered any (personal) space. Unfortunately, a repressive environment can lead to more aggressive behavior, emotional instability, and a worsening of problems. Residents have a decreased motivation to change and a dramatic decrease in positive treatment outcomes [21]. On could say that 'treatment' is pointless if the condition of a safe and open living environment is not met [17].

This study aims to gain insight into the relationship between the group climate and the QoL of patients in a long-term forensic ward. The first research question is 'How do long-term forensic mental health care patients perceive their QoL?' Based on previous research and because of the emphasis on QoL in a long-stay ward, we hypothesize that patients will rate their overall QoL as positive [24], with sexuality being the domain that will receive the lowest ratings [25,26]. In addition to self-reported patient measurements, staff members were requested to complete the QoL measurement (*i.e.*, proxy-measurements). Previous research has shown poor agreement between proxy assessments of QoL and self-reported measurement from patients [25]. Therefore, the second research question is as follows: 'What degree of agreement is there between the QoL scores provided by long-term forensic mental health care patients and the QoL proxy-measurements?'. Based on previous research, it is hypothesized that staff members will underestimate QoL ratings compared to patients [27].

Literature has indicated that group climate is evaluated differently by staff members and patients [28–30]. Consequently, the third research question is: 'How do long-term forensic mental health care patients and staff members experience the current group climate in a long-term ward in Belgium?' Given the prolonged interaction between patients and staff, as well as the unique characteristics of a long-term ward, it is hypothesized that the group climate will be average. The fourth research question is as follows: 'What is the level of agreement between group climate scores of long-term forensic mental health care patients and staff members?' The hypothesis is that staff members and patients will emphasize different aspects of group climate. More specifically, staff members will place greater emphasis on support, while patients will focus on cohesion and sexual needs [28,30–32].

A paucity of research has been conducted on the factors associated with QoL in forensic mental health care [33–35], with the majority of these studies concentrating on treatment settings rather than long-term facilities. Although no causal link has been found between QoL and group climate [8,9], we aimed to investigate the relationship between these two concepts. This potential causal link could be an important new way to improve the QoL of patients, which is a primary objective of long-term forensic care. Therefore, the fifth research question is 'What is the relationship between aspects of QoL and aspects of group climate?' It is hypothesized that the overall perception of an open and therapeutic group climate is positively correlated with QoL [33,34,36].

2. Materials and Methods

2.1. Participants

All data were collected in the only facility for long-term forensic psychiatric care (LFP) in Belgium, which houses 30 male internees with no short-term resocialization possibilities. The response rate for patients was 96.67% (n = 29). The demographic and clinical characteristics of the patients can be found in Table 1. Since our study only used retrospective data and the ward has not yet adopted the DSM-5, only diagnostic information based on the DSM-5 is

included in the table. We only report the main diagnosis for which the patient was admitted to the ward. With regard to staff members, the response rate was 100% (n = 22).

Table 1. Demographic and Clinical Characteristics of the Patients.

Characteristics	**Results**
Male gender (%)	29 (100%)
Age, years: mean (SD; range)	65.74 (9.73; 44.91–81.76)
Length of stay within facility years: mean (SD; range)	5.09 (2.32; 1.10–7.68)
Main diagnosis: axis I (%)	
Pedophilia	11 (37.93%)
Pervasive developmental disorder	1 (3.45%)
Exhibitionism	1 (3.45%)
Impulse-control disorder NOS	1 (3.45%)
Main diagnosis: axis II (%)	
Antisocial personality disorder	12 (41.38%)
Schizoid personality disorder	2 (6.90%)
Narcissistic personality disorder	1 (3.45%)
Offense which led to mandatory stay (%)	
(attempted) Murder	5 (17.24%)
(attempted) Manslaughter	4 (13.79%)
Sexual offences	17 (58.62%)
Of which child abuse	15 (51.72%)
Other offences	3 (10.34%)

Note. n = 29. NOS = not otherwise specified.

2.2. Instruments

It has been previously established that all instruments used in this study have been demonstrated to be psychometrically valid questionnaires [6,7,20,29].

2.2.1. Forensic Inpatient Quality of Life Questionnaire—Short Version (FQL-SV)

The FQL-SV [6] was used to assess QoL for forensic psychiatric patients. The instrument consists of 20 items, comprising 15 domains (Activities, Leave, Residence, Nutrition, Hygiene, Health, Sexuality, Social Relations, Other Residents, Daily Staff, Affection, Autonomy, Self-Actualization, Religion, and Overall Quality of Life). Patients can identify their subjective level of agreement on an 11-point scale (0 = 'not at all' to 10 = 'completely'); higher scores indicate greater satisfaction.

2.2.2. Group Climate Inventory—Revised (GCI-R)

The GCI-R [30] is a tool to assess the group climate within a residential institution. The 40 items of the questionnaire are measured on a five-point Likert scale (1 = 'strongly disagree' to 5 = 'strongly agree') and grouped into five overarching scales: Support, Growth, Repression (scale is reverse coded), Peer interactions, and Physical environment. The aggregation of these scores yields a total perceived group climate score. Higher scores indicate a more open and therapeutic group climate.

2.2.3. Essen Climate Evaluation Schema (EssenCES-NL)

The EssenCES-NL [31] is a 17-item questionnaire measuring group climate. Items are rated on a five-point Likert scale (0 = 'not at all' to 4 = 'completely') and are grouped into three domains: Therapeutic Hold, Patients' Cohesion and Mutual Support, and Experienced Safety.

2.3. Procedure

The FQL-SV was administered to both staff and patients as part of the regular treatment evaluation. Patients completed the questionnaire annually to monitor QoL over time and identify potential targets for intervention. A semi-structured interview format was used in accordance with the recommendations of Doyle et al. [37]. In addition, two

staff members filled out the questionnaire for each patient as a proxy-measurement. The GCI-R and EssenCES-NL were administered to investigate the ward climate and to identify possible targets for interventions in the ward. The EssenCES-NL was administered to both patients and staff members, whereas the GCI-R was only administered to patients due to the first-person format of the questions. After data collection and analysis, the results were discussed with patients and staff to gain further insights into these findings and assist with interpretation.

2.4. Statistical Analyses

The data were analyzed using IBM SPSS Statistics 27. To investigate whether staff and patients have different views about QoL, the inter-rater reliability between patients and staff was calculated using the intraclass correlation (ICC) coefficient, with a two-way mixed effect variance model with absolute agreement. This model was used because a fixed number of staff members evaluated the QoL of the patients. An ICC > 0.70 indicates good agreement, and an ICC > 0.50 indicates moderate agreement [25]. Independent samples t-tests were used to investigate differences in views regarding group climate between staff members and patients. Pearson's correlation coefficients were used to investigate the relationship between the different subdomains of group climate and QoL for patients, with 0.10–0.30 as weak, 0.30–0.50 as moderate, and >0.50 as strong [38].

3. Results

3.1. Quality of Life

Table 2 displays the mean QoL scores of patients and staff (with a minimum score of 0 and a maximum score of 10). Patients were the most satisfied with Hygiene (M = 8.79, SD = 1.47), Social Relations (M = 8.55, SD = 1.38), and Acceptance of stay (M = 8.48, SD =2.40). Sexuality (M = 4.71, SD = 3.16) and Nutrition (M = 5.00, SD = 2.12) were the domains with which the participants were least satisfied. Staff members believed that patients were most satisfied with the safety of the Residence (M = 7.95, SD = 1.60) and least satisfied with Sexuality (M = 5.41, SD = 2.30) and overall Health (M = 5.86, SD = 2.11). Overall, staff members tended to have lower QoL scores than patients do. Significant differences between staff and patients were found for the following domains: Residence (pleasant environment; $t = 2.71$, $p = 0.008$), Nutrition ($t = -2.88$, $p = 0.005$), Hygiene ($t = 3.81$, $p < 0.001$), Social relations ($t = 2.40$, $p = 0.02$), Autonomy (make own decisions; $t = 4.60$, $p < 0.001$), Self-actualization ($t = 2.23$, $p = 0.03$) and Acceptance of stay ($t = 2.40$, $p = 0.02$).

Table 2 also displays the agreement between the self-assessment of QoL and the proxy-assessment. One domain, overall Health, showed an agreement above the threshold of >0.70, suggesting that staff members could adequately score this for their patients. Moderate agreement (ICC > 0.50) was found for the domains Leave, Nutrition, Other residents, Autonomy, and Acceptance of Stay. All other domains showed low agreement between the self-assessments and proxy-ratings.

3.2. Group Climate

Table 3 displays the mean scores concerning the group climate on the ward measured by the GCI-R. Two patients did not complete the questionnaire because of a limited attention span. Overall, patients reported high scores on Support (M = 4.13, SD = 0.78), Growth (M = 3.78, SD = 0.68), Mutual interaction (M = 3.24, SD = 0.79), and Living environment (M = 3.78, SD = 0.54) subscales. The Repression subscale had the lowest score (M = 2.24, SD = 0.64). Table 4 shows the total scores of the EssenCES-NL and its subscales, as well as the results of an independent *t*-test of the scores of staff members and patients. Both patients and staff members demonstrated high scores on Experienced Safety (Mpatients = 13.48; Mstaff = 13.14) and Therapeutic Hold (Mpatients = 15.52; Mstaff = 15.81). However, patients' Cohesion was found to be low (Mpatients = 9.21; Mstaff = 8.41). No significant differences were found between the scores of the patients and those of the staff members.

Table 2. Mean Scores and Independent Sample T-tests of Patients and Staff and Agreement (ICC) Regarding FQL Subscales.

FQL Subscales	Mean Patients (SD)	Mean Staff (SD)	Mean Diff (SE)	*t*	*p*	ICC	*p*
Activities	7.21 (2.34)	7.47 (1.57)	−0.27 (0.42)	−0.59	0.58	0.15	0.30
Leave	7.36 (2.81)	6.83 (1.75)	0.53 (0.58)	0.92	0.37	0.64	0.001 **
Residence (safety)	7.97 (2.58)	7.95 (1.60)	0.02 (0.52)	0.03	0.98	0.30	0.13
Residence (pleasant environment)	7.93 (1.91)	6.83 (1.73)	1.10 (0.41)	2.71	0.008 **	−0.24	0.75
Nutrition	5.00 (2.12)	6.32 (1.98)	−1.32 (0.46)	−2.88	0.005 **	0.64	<0.001 ***
Hygiene	8.79 (1.47)	7.64 (1.26)	1.15 (0.30)	3.81	<0.001 ***	0.43	0.02 *
Health (mental health treatment)	8.10 (2.44)	7.46 (1.49)	0.65 (0.49)	1.31	0.20	0.39	0.06
Health (overall health)	6.48 (2.79)	5.86 (2.11)	0.62 (0.53)	1.16	0.25	0.77	<0.001 ***
Sexuality	4.71 (3.16)	5.41 (2.30)	−0.70 (0.67)	−1.05	0.30	0.45	0.03 *
Social relations	8.55 (1.38)	7.79 (1.40)	0.76 (0.32)	2.40	0.02 *	−0.06	0.55
Other residents	6.69 (1.95)	6.92 (1.24)	−0.23 (0.40)	−0.57	0.57	0.51	0.01 *
Daily staff	8.34 (2.40)	7.73 (1.28)	0.62 (0.48)	1.30	0.20	0.37	0.07
Affection	8.24 (2.70)	7.51 (1.18)	0.73 (0.52)	1.40	0.17	0.39	0.05
Autonomy (move freely)	7.52 (2.79)	7.20 (1.76)	0.31 (0.57)	0.55	0.58	0.51	0.01 *
Autonomy (make own decisions)	8.17 (1.89)	6.46 (1.51)	1.72 (0.37)	4.60	<0.001 ***	0.51	0.002 **
Self-actualization	7.62 (2.46)	6.53 (1.39)	1.01 (0.49)	2.23	0.03 *	0.33	0.09
Religion	6.69 (3.50)	7.19 (1.93)	−0.50 (0.70)	−0.71	0.48	0.47	0.03 *
Acceptance of stay	8.48 (2.40)	7.27 (2.14)	1.21 (0.51)	2.40	0.02 *	0.61	<0.001 ***
Overall QoL	7.21 (2.58)	7.03 (1.80)	0.17 (0.52)	0.33	0.74	0.34	0.11

Note. $n_{patients} = 28$, $n_{staff} = 57$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 3. Perspective of Patients ($n = 27$) about Group Climate Measured by the GCI-R.

GCI-R Subscales	Minimum	Maximum	Mean (SD)
Support	1.00	5.00	4.13 (0.78)
Growth	2.29	5.00	3.78 (0.68)
Repression	1.33	4.11	2.24 (0.64)
Mutual interaction	1.89	4.56	3.24 (0.79)
Living environment	2.71	4.86	3.78 (0.54)
GCI-R total score	2.17	4.50	3.72 (0.52)

Table 4. Independent Samples T-test: Group Climate between Patients and Staff using the EssenCES-NL.

EssenCES-NL Subscales	Mean Patients (SD)	Mean Staff (SD)	*t*	*p*	Cohens *d*
Patients' Cohesion	9.21 (4.15)	8.41 (2.75)	0.82	0.41	0.22
Experienced Safety	13.48 (3.95)	13.14 (4.31)	0.30	0.77	0.08
Therapeutic Hold	15.52 (3.70)	15.81 (1.71)	−0.39	0.70	−0.10
Total	38.21 (7.43)	37.36 (5.92)	0.44	0.66	0.12

Note. $n_{patients} = 29$, $n_{staff} = 22$.

3.3. Correlation between Quality of Life and Group Climate

The correlations between the FQL and the EssenCES-NL can be found in Table 5. The majority of the FQL domains correlated significantly positively with Therapeutic Hold: Activities, Leave, Residence (safety and pleasant environment), mental Health treatment, Sexuality, Other residents, Daily staff, Affection, Autonomy (move freely), Self-actualization, Religion, Acceptance of stay, and Overall QoL. This finding suggests a positive correlation between patient satisfaction and staff-patient relationship quality, with higher domain scores indicating enhanced relationships. The domains Activities, Residence (safety), mental Health treatment, Other residents, Daily staff, Affection, Self-actualization, and Religion are (significantly) positively correlated with Patients' Cohesion and Mutual Support. Therefore, elevated scores in these domains indicate stronger mutual relationships and support among patients. The only domain that showed a significant correlation with the perceived level of safety was overall health. This finding suggests that as the overall health score increases, the degree of safety experienced within the ward also tends to rise.

With regard to the GCI-R (see Table 6), only Hygiene and Autonomy (making one's own decisions) significantly correlated with the subscale Growth, suggesting that higher scores on these domains are associated with a greater feeling of having the opportunity to grow. The FQL domain Sexuality only correlated with the subscale Support. The domains of overall Health, Nutrition, and Social relations had no significant correlation with any of the GCI-subscales, suggesting that these domains are not related to the group climate. All other FQL domains had more than one significant correlation with the group climate subscales.

Table 5. Correlations between FQL subscales and Group Climate for Patients using the EssenCES-NL.

FQL Subscales	ESS-TH	ESS-PC	ESS-ES
Activities	0.59 **	0.65 **	−0.03
Leave	0.38 *	0.09	0.07
Residence (safety)	0.55 **	0.43 *	0.22
Residence (pleasant environment)	0.49 **	0.17	0.19
Nutrition	0.15	0.24	−0.01
Hygiene	0.34	0.17	−0.19
Health (mental health treatment)	0.80 **	0.50 **	0.03
Health (overall health)	−0.09	−0.07	0.37 *
Sexuality	0.39 *	0.08	0.12
Social relations	0.36	0.18	0.11
Other residents	0.42 *	0.58 **	0.18
Daily staff	0.81 **	0.38 *	−0.17
Affection	0.76 **	0.40 *	−0.09
Autonomy (move freely)	0.49 **	0.25	−0.07
Autonomy (make own decisions)	0.25	0.10	0.18
Self-actualization	0.66 **	0.40 *	−0.10
Religion	0.60 **	0.55 *	−0.28
Acceptance of stay	0.53 **	0.32	0.07
Overall QoL	0.61 **	0.37	0.14

Note. QoL = Quality of Life; ESS-TH = EssenCES Therapeutic Hold subscale; ESS-PC = EssenCES Patients' Cohesion and Mutual Support subscale; ESS-ES = EssenCES Experienced Safety subscale. * $p < 0.05$, ** $p < 0.01$.

Table 6. Correlations between QoL subscales and Group Climate for Patients using the GCI-R.

QoL Subscales	Support	Growth	Repression	Mutual Interaction	Physical Environment
Activities	0.50 **	0.72 **	−0.35	0.30	0.72 **
Leave	0.52 **	0.44	−0.49 *	0.05	0.49 *
Residence (safety)	0.55 **	0.29	−0.54 **	0.60 **	0.43 *
Residence (pleasant environment)	0.41 *	0.37	−0.36	0.10	0.57 **
Nutrition	−0.06	0.30	−0.08	−0.18	0.27
Hygiene	0.31	0.64 **	−0.25	0.02	0.28
Health (mental health treatment)	0.80 **	0.69 **	−0.62 **	0.36	0.62 **
Health (overall health)	−0.15	0.12	−0.09	0.05	−0.09
Sexuality	0.41 *	0.26	−0.22	0.21	0.16
Social relations	0.09	0.09	0.04	0.34	0.19
Other residents	0.34	0.42 *	−0.17	0.64 **	0.53 **
Daily staff	0.85 **	0.60 **	−0.60 **	0.32	0.50 **
Affection	0.84 **	0.60 **	−0.66 **	0.38 *	0.53 **
Autonomy (move freely)	0.68 **	0.43 *	−0.50 **	0.37	0.51 **
Autonomy (make own decisions)	0.16	0.40 *	−0.15	0.20	0.22
Self-actualization	0.73 **	0.60 **	−0.55 **	0.14	0.65 **
Religion	0.52 **	0.69 **	−0.58 **	0.41 *	0.60 **
Acceptance of stay	0.64 **	0.43 *	−0.55 **	0.08	0.54 **
Overall QoL	0.67 **	0.62 **	−0.53 **	0.20	0.60 **

Note. QoL = Quality of Life; * $p < 0.05$, ** $p < 0.01$.

4. Discussion

The objective of this study was to gain insight into the QoL and group climate of forensic psychiatric patients residing in a long-term ward in Belgium.

4.1. Quality of Life

Patients seemed to be content with the QoL domains and overall QoL, except for the domains Sexuality and Nutrition (with scores of 4.71 and 5.00, respectively). The domain of Sexuality was rated the lowest, which is in line with earlier research [25,26]. A possible explanation for this could be the current taboo around this topic [25]. Sexuality is a complex topic within forensic settings, given that many of the admitted patients have committed sexual offenses (e.g., 59% of our sample). For that reason, many staff members may avoid the topic because of uncertainty in how to address this issue with sex offenders. For example, different patients indicated during the interview that "sexuality is not for me anymore due to past (illegal) sexual behavior." Nevertheless, the fact that an individual has previously exhibited prosocial behaviors in satisfying their sexual [39] does not imply that this basic fundamental need should be disregarded in the future. This issue transcends the confines of individual wards: management should invest in reformations of the policies concerning sexuality in forensic hospitals before individual wards can translate these recommendations into practice [26,40]. These practices should be available for all patients, based on a balance between risk, need, and responsivity [40,41].

The domain Nutrition had the second worst of all QoL scores, which aligns with earlier research [26]. In the institution, meals are delivered three times a day. These meals are based on the recommended ingredients needed to live a healthy life [42]. However, previous research has demonstrated that individuals diagnosed with mental illnesses exhibit diminished levels of nutritional knowledge [43]. Furthermore, personality factors can potentially influence individuals' sentiments regarding nutrition. This may result in possible barriers to eating healthy [43]. Most importantly, autonomy is limited in terms of meal selection within the facility: a predetermined menu is offered for lunch, while breakfast and dinner options are selected in advance from a selection of two condiments. Reasonably, it is possible that one does not like every meal provided by the institution.

Related to Nutrition is the somewhat lower score on overall Health. This is contrary to earlier research [26] but may be explained by the older mean age (66 years) and the unfavorable health behaviors of the patients in the ward (e.g., sedentary lifestyle and poor nutritional habits both in the patients' past and present, such as snacking on top of delivered meals). Hospitalization time is also positively associated with weight gain [44], with our population having a rather long stay (*i.e.*, 5.09 years). Furthermore, earlier research has shown that people diagnosed with mental disorders exhibit an elevated risk of mortality due to adverse health complications [45]. These researchers further argued that due to the long-term nature of forensic mental health services, including treatment goals that focus on lifestyle behaviors could be an opportunity to increase physical health [45]. Unfortunately, long-term patients often lack motivation to change [46,47]. It is recommended that dieticians assist and coach patients and staff members to enhance the nutritional health of forensic mental health care patients [48].

The findings did not support the second research question, which inquired about the potential for staff members to serve as effective proxy assessors on behalf of patients. This finding aligns with the results of previous research [27]. Staff members were significantly more skeptical concerning the items' Pleasant environment, Hygiene, Making their decision, Self-actualization and Acceptance of stay. This could be explained by self-enhancement bias, where patients often perceive their own situation as more favorable than proxy assessors do [49]. For Nutrition, staff members scored significantly higher than patients did. These results align with previous research and recommendations that argue that when investigating QoL, self-reports are preferred over proxy measures [27,50] unless the proxy is trained to do so [25].

4.2. Group Climate

Overall, patients and staff members seemed satisfied with the group climate. Therapeutic Hold was rated high, as were Support and Growth. Both patients and staff members indicated that their relationship is quite good to very good. This outcome is not surprising given that one of the primary goals of LFP is to establish an environment founded on mutual trust between staff members and patients, to promote a positive and fulfilling life [51]. In addition to this goal, patients are seen as individuals with strengths and vulnerabilities rather than offenders [7]. The perception of safety on the ward was rated between 'somewhat safe' and 'pretty safe' by both patients and staff. Previous research has linked perceptions of personal safety in both the living and work environments to a decrease in patient aggression [52,53]. Incidents were not taken into account in this study; however, it was indicated by both staff and patients that the incident

ratio was particularly low on the ward, which might seem surprising given the profile of patients residing on the ward. The lower score on the Repression scale may also serve as an indicator of succeeding in achieving this goal. Patients' Cohesion was rated the lowest between 'little' and 'somewhat' present. Based upon the discussion of the results with staff members, the proposition arose to organize more activities on and off the ward to create bonding experiences. However, patients exhibit strong preferences regarding their companions for activities and the individuals with whom they engage in conversation. They also often express a desire to be left alone. This makes it challenging for staff members to organize activities that are appreciated by all patients.

No significant differences were found between staff members and patients concerning Patients' Cohesion and Mutual Support, Experienced Safety, and Therapeutic Hold. This is contrary to our expectation that staff members and patients place different emphases on climate factors. According to the findings of earlier research conducted with the EssenCES, staff members scored higher on Therapeutic Hold. Conversely, patients scored higher on Cohesion and Mutual Support, as well as Experienced Safety [28–30]. An explanation for why our study did not find similar results may be the limited number of individuals participating in this research and, possibly, the inability to complete the questionnaires anonymously (see strengths and limitations). Although the results are not statistically significant, the observed differences align with the findings of previous research (cf. infra). Comparing findings concerning group climate with previous studies is challenging because of the many different methods and scales used to measure the construct and the lack of a widely accepted definition [37]. Therefore, optimizing operationalization of the group climate within long-term forensic mental health care is necessary.

4.3. Correlation between Quality of Life and Group Climate

In this study, several facets of group climate were positively correlated with perceived overall QoL for patients: Therapeutic Hold, Support, Growth, low Repression rates, and Residence (pleasant environment). This finding suggests that patients may not prioritize the development of relationships with other patients, a notion that could be supported by the principles of the self-determination theory [54]. However, it could be hypothesized that patients search for their need for relatedness in relationships with staff members and/or members in the community outside the ward (such as family or friends). The results support the former (high correlations between the QoL domains asking about staff level factors) but not the latter. No correlations were found between the QoL domain Social relations and any of the group climate subscales. Furthermore, an inverse relationship was found between repression and QoL. This is not surprising: repression includes the degree of control and the installment of rules that hinder autonomy [55], and autonomy is one of the basic needs of an individual to enhance his/her well-being [54]. Two aspects of autonomy were measured here: (1) the degree of moving freely and (2) the ability to make one's own decisions. Autonomy, measured by the degree of moving freely, was positively correlated with different climate domains, whereas the ability to make one's own decisions was only positively correlated with Growth. The Growth scale assesses the degree to which individuals experience a sense of competence and the discovery of meaning in life within the institution [55], which is a fundamental need [56]. Overall, it is to be investigated whether the QoL measure does not already tap into the climate construct. Several correlations were very strong, highlighting that the subscales might measure the same construct.

4.4. Implications

It is important for forensic institutions to improve the group climate, as the findings of this study suggest that enhancing the group atmosphere may contribute to QoL. This can be achieved through various means, such as staff training in communication, implementing supportive policies and procedures, and promoting a sense of autonomy and respect for residents' rights. It is also important to remember that due to the prolonged nature of these kinds of wards, a risk exists that the stay within the long-term institution becomes a "life sentence in disguise" [57]. This already seems to be the case for LFP. Many patients indicated that they never wanted to resocialize back into the community. LFP, in many cases, represents their first and only home. However, keeping people in long-term care when they no longer need it raises ethical and social concerns. In addition, LFP only has room for 30 patients, and numerous mentally ill offenders are currently awaiting a transfer to the ward. An objective measure could help evaluate the need for a secured long-term setting after a period of time. In this regard, conducting an annual evaluation would be a prudent course of action.

4.5. Strengths, Limitations and Suggestions for Future Research

A notable strength of this study is that it relied on responses from patients and staff members of nearly the entire forensic mental health ward, allowing us to gain a comprehensive understanding of the QoL and group climate in that ward. Nevertheless, it is imperative to interpret the findings of this study within the confines of its limitations. Firstly, despite the participation of nearly the entire ward, only one male-only ward participated, and the number of patients included in the study was relatively limited. Therefore, the sample's representativeness for other long-term forensic mental health wards may be limited. Further research is required to ascertain the extent to which these findings generalize. Secondly, the present study only used self-report questionnaires, increasing the risk of untruthful answers and inflated correlations due to common-method bias [58]. Thirdly, the patient questionnaires were not administered anonymously, thus increasing the risk of untruthful answers. However, the patient questionnaires were administered using a semi-structured interview format. In this format, individuals were allowed to provide detailed reasoning behind a particular score and elaborate on related matters. Fourthly, the psychopathology and demographic characteristics of patients and the characteristics of staff members and the physical environment, have been linked to the outcomes of QoL [59] and group climate [9,28,37]. This study did not take these characteristics into account due to the anonymity of the respondents. Finally, this study examined only cross-sectional associations between QoL and group climate. Future research could focus on a longitudinal dataset to gain more insight into the factors that are important in the association between QoL and group climate using a multi-method design. Objective indicators could also be included when looking at the relationship between QoL and group climate (e.g., length of stay, aggressive incidents, *etc*.). Future research could try to determine significant predictors of overall QoL and individual domains, especially since group climate factors have been shown to account for a large proportion of the variance in specific QoL domains [34].

5. Conclusions

Overall, the results revealed high quality of life (QoL) and group climate scores for patients and staff members. Staff members, however, were assigned significantly lower scores on the QoL scale in comparison to patients. No significant differences were found between patients and staff members with regard to group climate. In conclusion, it is crucial for forensic institutions to prioritize the creation of a positive group climate in long-term forensic wards, given its potential correlation with the quality of life of patients.

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Author Contributions

Conceptualization and design of the study, A.B., S.D., I.J. and S.P.; Material preparation, data collection and analysis, A.B.; first draft of the manuscript, A.B. and V.V.B. All authors commented on previous version of the manuscript, and read and approved the final manuscript.

Ethics Statement

This was a retrospective study. Therefore, according to Belgian law, the study did not require ethical approval.

Informed Consent Statement

Since this was a retrospective study, an informed consent was not required.

Data Availability Statement

The research data is available on reasonable request.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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