BAYERISCHER INTENSIVPFLEGETAG

EINBLICKE IN DAS ERLEBEN BEATMETER PATIENTEN UND DIE RELEVANZ FÜR PFLEGEPERSONEN

FRITZ STERR

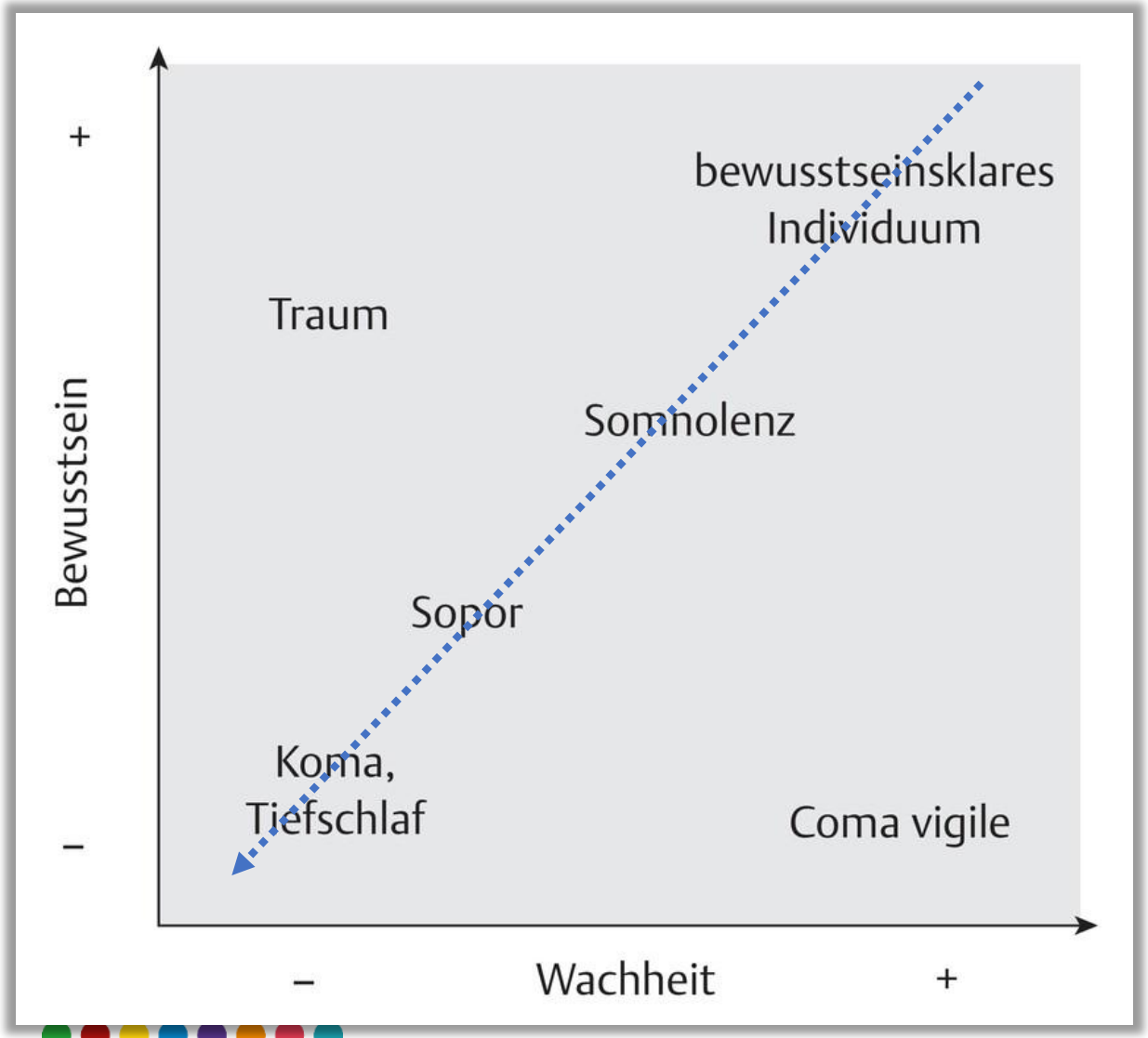
17.09.2025

AGENDA

1. Können beatmete Patienten „erleben“?
2. Warum ist das Erleben relevant?
3. Einblicke in das Erleben
4. Literatur

KÖNNEN BEATMETE „ERLEBEN“?

BEWUSSTSEIN UND WACHHEIT



Mattle & Fischer, 2021, S. 122

- Somnolenz, Sopor und Koma gehen mit einer Trübung von zugleich Wachheit und Bewusstsein einher
- Im Traum sind Menschen bei Bewusstsein, aber nicht wach
- Im Coma vigile (Wachkoma) liegt eine schwere Bewusstseinsstörung mit fortwährender Wachheit vor
- Bedeutend: Es gibt keinen absoluten Nullpunkt; Menschen können nicht *nicht bei Bewusstsein* sein

SCHMERZEN UNTER SEDIERUNG

RESEARCH

BACN Nursing in Critical Care WILEY

Pain intensity of sedated paediatric intensive care unit patients during treatment and care procedures

Derya Akgün MSc, Nurse[1] | Sevil İnal, Prof Dr[2]

Ergebnisse

30 Kinder wurden eingeschlossen, darunter 12 im Alter von 1 bis 6.

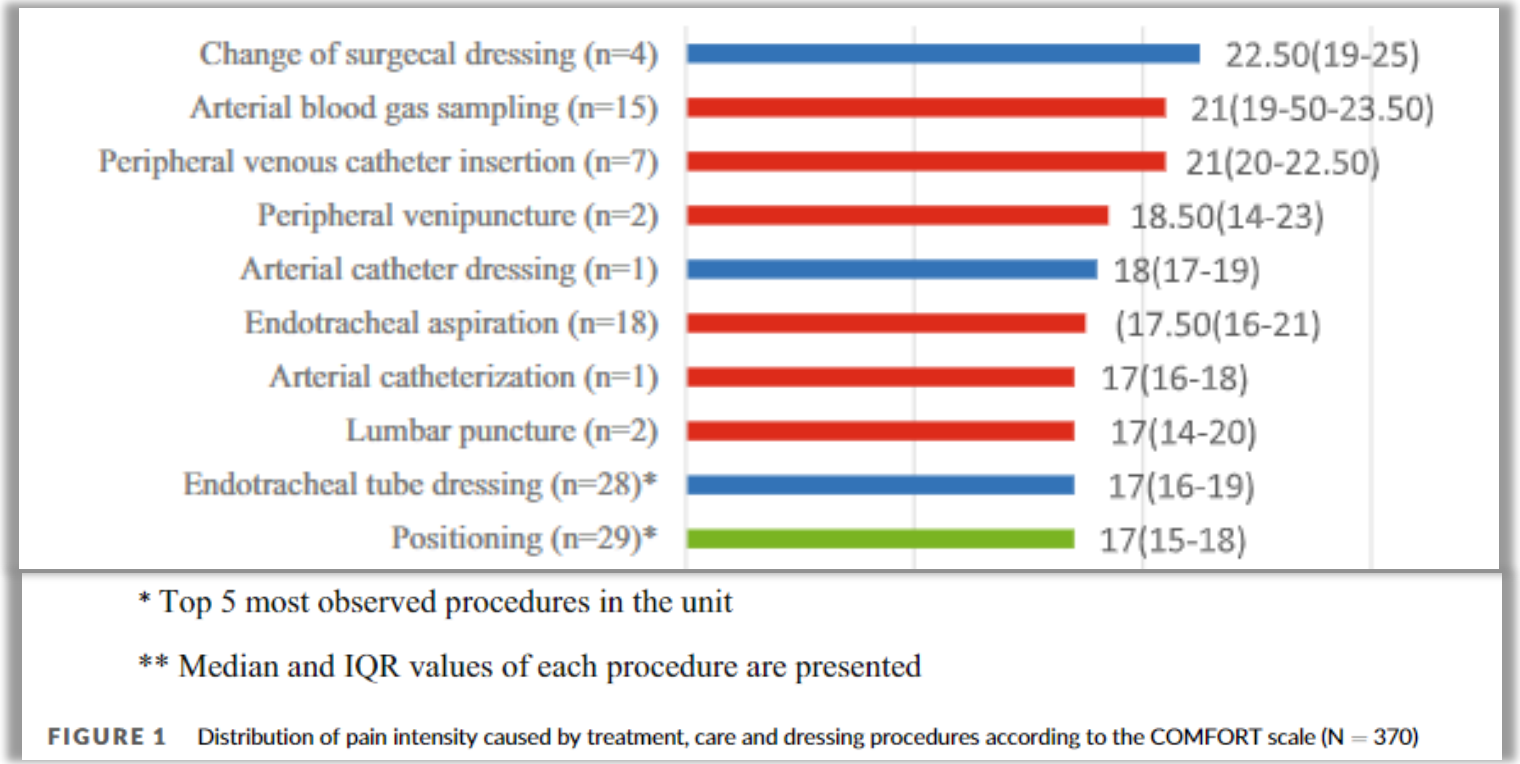


FIGURE 1 Distribution of pain intensity caused by treatment, care and dressing procedures according to the COMFORT scale (N = 370)

Akgün & Inal, 2022

SCHMERZEN UNTER SEDIERUNG

Critical Care and Trauma
Section Editor: **Jukka Takala**

The Use of the Behavioral Pain Scale to Assess Pain in Conscious Sedated Patients

Sabine J. G. M. Ahlers, MSc* **BACKGROUND:** Assessing pain in mechanically ventilated critically ill patients is a

80 Patienten unter Beatmung & moderater bzw. tiefer Sedierung

Vergleich der Schmerzeinschätzung mittels Behavioral Pain Scale

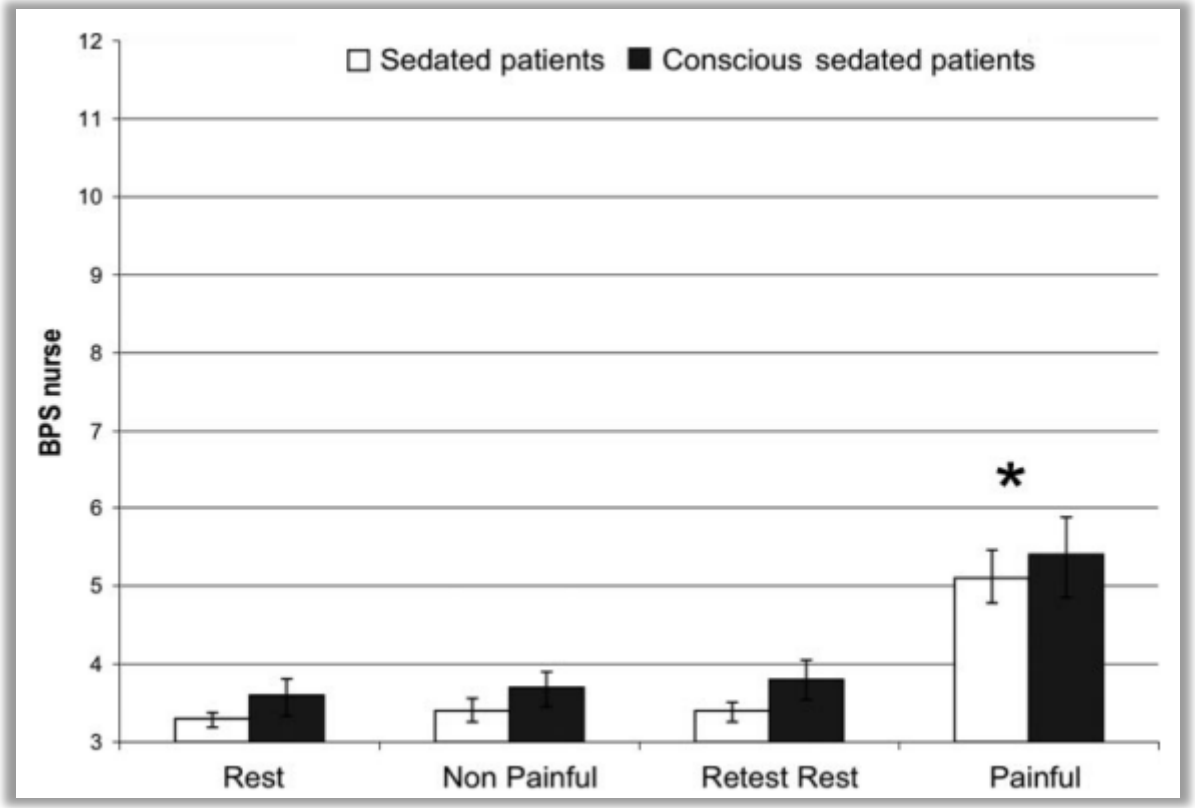


Table 4. BPS Total Scores and BPS Items Scores (Mean ± SD) at Rest and During Painful Procedure, with Effect Size in Sedated Patients (126 Observation Series) and Conscious Sedated Patients (49 Observation Series)

	Retest rest	Painful procedure	*P*	Effect size
Sedated patients				
BPS total	3.4 ± 0.7	5.1 ± 1.0	<0.001	2.5
BPS facial expression	1.1 ± 0.3	2.1 ± 1.0	<0.001	3.6
BPS upper limb movement	1.2 ± 0.4	1.4 ± 0.7	<0.001	0.7
BPS compliance ventilation	1.1 ± 0.4	1.6 ± 0.7	<0.001	1.4
Conscious sedated patients				
BPS total	3.8 ± 0.9	5.4 ± 1.8	<0.001	1.8
BPS facial expression	1.1 ± 0.4	2.0 ± 1.0	<0.001	2.4
BPS upper limb movement	1.5 ± 0.6	1.8 ± 0.8	0.003	0.5
BPS compliance ventilation	1.2 ± 0.4	1.6 ± 0.5	<0.001	0.9

BPS = Behavioral Pain Score.

Ahlers et al., 2010

SCHMERZEN UNTER SEDIERUNG

Effect of Sedation on Pain Perception

Michael A. Frölich, M.D., M.S.,* Kui Zhang, Ph.D.,† Timothy J. Ness, M.D, Ph.D.‡

86 gesunde Patienten

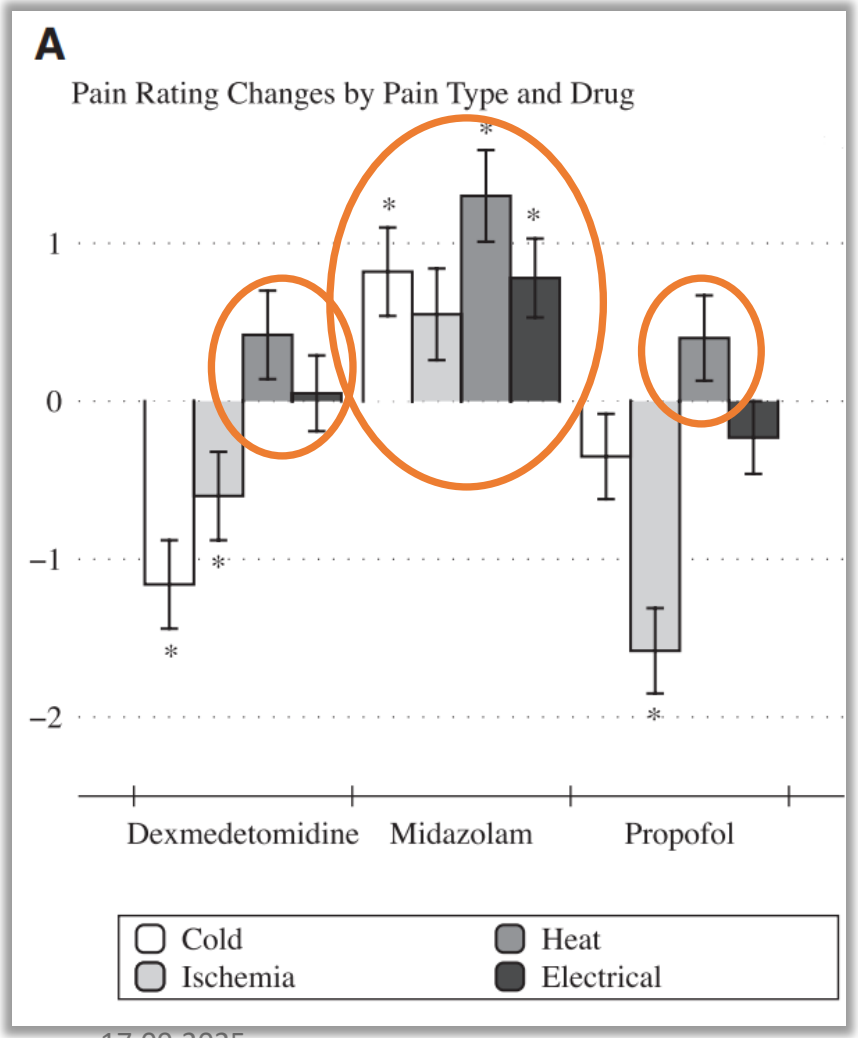


Table 3. Outcome: Pain Rating Change (Sedation – Baseline) for Model 1*

Drug Level	Least-Squares Means	SEM
Dexmedetomidine	−0.253	0.168
Midazolam	0.762	0.171
Propofol	−0.346	0.159

*Fixed effect tests and least-squares means.

Frölich et al., 2013

RELEVANZ DES ERLEBENS

ANTEIL DES WEANINGS

Evolution of Mechanical Ventilation in Response to Clinical Research

Andrés Esteban[1], Niall D. Ferguson[2], Maureen O. Meade[3], Fernando Frutos-Vivar[1], Carlos Apezteguia[4], Laurent Brochard[5], Konstantinos Raymondos[6], Nicolas Nin[1], Javier Hurtado[7], Vinko Tomicic[8], Marco González[9], José Elizalde[10], Peter Nightingale[11], Fekri Abroug[12], Paolo Pelosi[13], Yaseen Arabi[14], Rui Moreno[15], Manuel Jibaja[16], Gabriel D'Empaire[17], Fredi Sandi[18], Dimitros Matamis[19], Ana María Montañez[20], and Antonio Anzueto[21], for the VENTILA Group*

[1]CIBER Enfermedades Respiratorias, Hospital Universitario de Getafe, Madrid, Spain; [2]Interdepartmental Division of Critical Care Medicine, and Division of Respirology, Department of Medicine, University Health Network, University of Toronto, Toronto, Canada; [3]Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Canada; [4]Hospital Profesor A. Posadas, El Palomar, Buenos Aires, Argentina; [5]AP-HP, Centre Hospitalier Albert-Chenvier–Henri Mondor, INSERM U 841, Université Paris 12, Paris, France; [6]Medizinische Hochschule, Hannover, Germany; [7]Hospital de Clínicas, Montevideo, Uruguay; [8]Clínica Alemana de Santiago, Santiago, Chile; [9]Clínica Medellín y Universidad Pontificia Bolivariana, Medellín, Colombia; [10]Hospital ABC, México DF, México; [11]Wythenshawe Hospital, Manchester, United Kingdom; [12]Fattouma Bourguiba Monastir, Tunisia; [13]Ospedale di Circolo, Universita' degli Studi dell'Insubria, Varese, Italy; [14]King Fahad National Guard Hospital, Riyadh, Saudi Arabia; [15]Hospital de Santo António dos Capuchos, Lisboa, Portugal; [16]Hospital Militar de Quito, Quito, Ecuador; [17]Hospital de Clínicas, Caracas, Venezuela; [18]Hospital Obrero Número 1, La Paz, Bolivia; [19]Papageorgiou General Hospital, Thessaloniki, Greece; [20]Sociedad Peruana de Medicina Intensiva, Lima, Peru; and [21]South Texas Veterans Health Care System and University of Texas Health Science Center, San Antonio, Texas

→ Prospektive Beobachtungsstudie

→ 349 Intensivstationen

→ 23 Länder

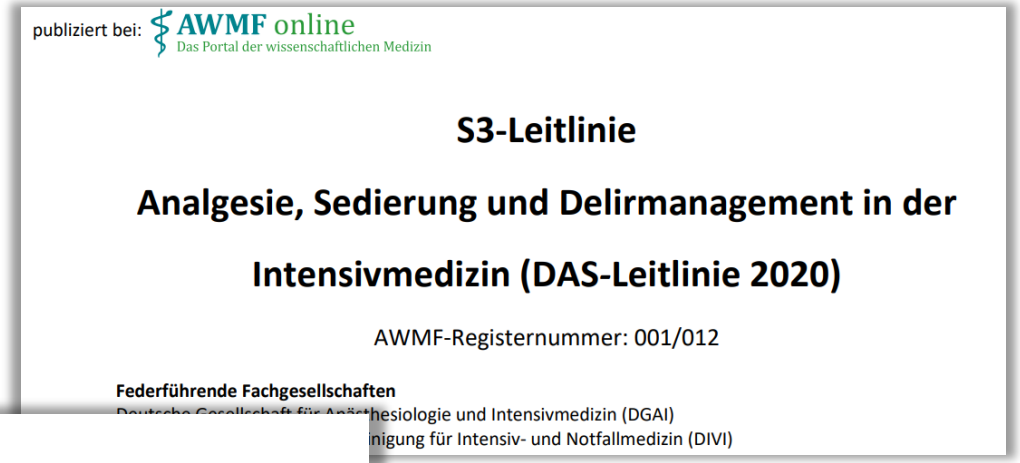
→ 4,968 Patienten unter maschineller Beatmung

TABLE 5. CHARACTERISTICS AND OUTCOMES OF PATIENTS WHO UNDERWENT PLANNED EXTUBATION

	1998 Cohort (*n* = 780)	2004 Cohort (*n* = 869)	*P* Value
Age, mean (SD), yr	58 (19)	56 (18)	0.02
Simplified Acute Physiology Score II, mean (SD), points	42 (16)	40 (17)	0.08
Main reason for mechanical ventilation, n (%)			
COPD	85 (11)	53 (6%)	<0.001
Asthma	10 (1)	18 (2%)	0.21
Other chronic pulmonary disease	3 (0.4)	7 (1%)	0.27
Coma	154 (20)	221 (25%)	0.006
Neuromuscular disease	11 (1)	12 (1%)	0.96
Acute respiratory failure			
Postoperative	178 (23%)	163 (19%)	0.04
Pneumonia	85 (11%)	87 (10%)	0.56
Sepsis	50 (6%)	72 (8%)	0.15
ARDS	22 (3%)	24 (3%)	0.94
Congestive heart failure	96 (12%)	51 (6%)	<0.001
Cardiac arrest	14 (2%)	37 (4%)	0.004
Trauma	59 (8%)	37 (4%)	0.004
Aspiration	16 (2%)	15 (2%)	0.63
Other cause	52 (7%)	72 (8%)	0.21
Days of mechanical ventilation prior to weaning, median (IQR)	3 (2,6)	4 (2,7)	0.004
Days of weaning in difficult-to-wean patients median (IQR)*	3 (2, 5)	3 (2, 4)	0.94
Time devoted to weaning, median (IQR), % of total ventilation time	50 (28, 67)	40 (25, 50)	<0.001
Reintubation within 48 h, n (%)	127 (16.3)	105 (12.1)	0.01

Esteban et al., 2008

AKTUELLE EMPFEHLUNGEN


publiziert bei: AWMF online
Das Portal der wissenschaftlichen Medizin

S3-Leitlinie

Analgesie, Sedierung und Delirmanagement in der Intensivmedizin (DAS-Leitlinie 2020)

AWMF-Registernummer: 001/012

Federführende Fachgesellschaften

Deutsche Gesellschaft für Anästhesiologie und Intensivmedizin (DGAI)

nigung für Intensiv- und Notfallmedizin (DIVI)

Leitsatz:

Intensivstationäre Patientinnen und Patienten sollen wach, aufmerksam, schmerz-, angst- und delirfrei sein, um an der eigenen Behandlung und Genesung aktiv teilnehmen zu können.

DGAI et al., 2021

AKTUELLE EMPFEHLUNGEN

publiziert bei: AWMF online
Das Portal der wissenschaftlichen Medizin

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Deutsche Interdisziplinäre Vereinigung für Intensiv- und Notfallmedizin (DIVI)

2.1 Eine nicht-pharmakologische Prävention des Delirs soll bei allen intensivmedizinisch-behandelten Patient:innen durchgeführt werden[37-39]: Tagsüber sollen aktivierende Maßnahmen durchgeführt werden. Nachts sollen schlaffördernde Maßnahmen durchgeführt werden.	++++	A A A
2.2 Eine Übersedierung soll vermieden werden[32, 40]	+++	A

DGAI et al., 2021

ZWISCHENFAZIT

Evolution of Mechanical Ventilation in Response to Clinical Research

Andrés Esteban[1], Niall D. Ferguson[2], Maureen O. Meade[3], Fernando Frutos-Vivar[1], Carlos Apezteguia[4], Laurent Brochard[5], Konstantinos Raymondos[6], Nicolas Nin[1], Javier Hurtado[7], Vinko Tomicic[8], Marco González[9], José Elizalde[10], Peter Nightingale[11], Fekri Abroug[12], Paolo Pelosi[13], Yaseen Arabi[14], Rui Moreno[15], Manuel Jibaja[16], Gabriel D'Empaire[17], Fredi Sandi[18], Dimitros Matamis[19], Ana María Montañez[20], and Antonio Anzueto[21], for the VENTILA Group*

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journal homepage: www.elsevier.com/locate/ns

The effect of the ABCDE/ABCDEF bundle on delirium, functional outcomes, and quality of life in critically ill patients: A systematic review and meta-analysis

Kellie Sosnowski [a,b,c,*], Frances Lin [d], Wendy Chaboyer [a,c,e], Kristen Ranse [a], Aaron Heffernan [b,f,g], Marion Mitchell [a,c]

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[e] National Health and Medical Research Council (NHMRC), Centre of Research Excellence in Wiser Wound Care, Griffith University, Queensland, Australia
[f] School of Medicine and Dentistry, Griffith University, Australia
[g] Faculty of Medicine, University of Queensland, Australia

Der Anteil der „bewussten Zeit“ unter maschineller Beatmung nimmt kontinuierlich zu

EINFLUSS DES ERLEBENS

Intensive Care Med (2004) 30:1334–1339
DOI 10.1007/s00134-004-2231-7

ORIGINAL

Adil Salam
Lisa Tilluckdharry
Yaw Amoateng-Adjepong
Constantine A. Manthous

Neurologic status, cough, secretions and extubation outcomes

Table 2 Predictive characteristics of various parameters in predicting extubation failure

Variable	Sensitivity (%)	Specificity (%)	Likelihood ratio	Risk ratio (95% CI)
CPF ≤60 l/min	76.9	65.7	2.2	4.8 (1.4–16.2)
Secretions >2.5 ml/h	71.4	62.0	1.9	3.0 (1.01–8.8)
<4 tasks	42.8	90.5	4.5	4.3 (1.8–10.4)
Any 2 risks	71.4	81.1	3.8	6.7 (2.3–19.3)
Negative WCT	71.4	51.4	1.5	2.3 (0.8–6.7)
RSBI >100/min per l	14.3	93.2	2.1	1.9 (0.5–6.9)

CPF cough peak flow, *<4 tasks* inability to perform any one command, *Any 2 risks* of CPF ≤60 l/min, secretions ≥2.5 ml/h or <4 tasks, *WCT* white card test, *RSBI* rapid shallow breathing index (=f/V_t)

→ Patienten, die neurologisch eingeschränkt waren, hatten ein höheres Risiko für ein Weaning-Versagen

Neurologische Aufgaben: Augen öffnen, mit Augen Finger folgen, Hand drücken, Zunge rausstrecken

Salam et al., 2004

EINFLUSS DES ERLEBENS

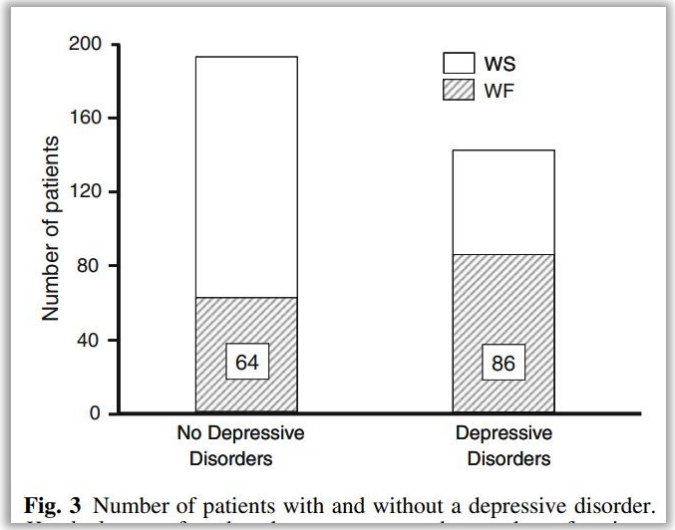

Fig. 3 Number of patients with and without a depressive disorder.

Table 4 Effect of depressive disorders on patient outcome

Variable	No depressive disorders ($n = 194$)	Depressive disorders ($n = 142$)	P value
Weaning failure (%)	33.0	60.6	0.0001
Mortality (%)	10.3	23.9	0.0008
Duration of MV at RMLH, days, median (IQR)	13 (5–38)	24 (8–41)	0.007
Length of stay at RMLH, days, median (IQR)	33 (24–42)	35 (23–46)	0.55

IQR interquartile range

Intensive Care Med (2010) 36:828–835
DOI 10.1007/s00134-010-1842-4

ORIGINAL

Amal Jubran
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Gokay Gungor
Eileen G. Collins
Dorothy M. Lanuza
Leslie A. Hoffman
Martin J. Tobin

Depressive disorders during weaning from prolonged mechanical ventilation

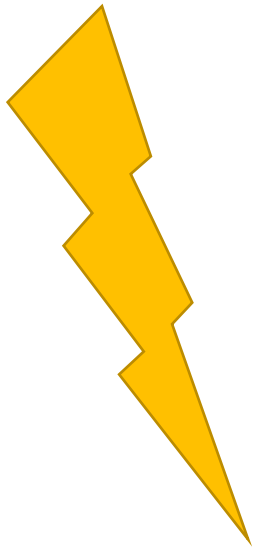
Table 5 Multivariate logistic regression of variables predicting mortality

Variable	Odds ratio	95% CI	P value
Depressive disorders	4.32	1.99–9.33	0.0002
Charlson Comorbidity Index	1.24	1.03–1.49	0.02
Previous psychiatric history	0.85	0.38–1.90	0.69
Age	1.06	1.02–1.09	0.001
Etiology of respiratory failure			
Postoperative	0.58	0.23–1.49	0.26
Acute lung injury	1.11	0.44–2.80	0.82
COPD	0.89	0.19–4.17	0.88
Neuromuscular	0.66	0.16–2.63	0.55
Duration of mechanical ventilation before transfer	1.00	0.99–1.02	0.17
APACHE II	1.06	0.97–1.16	0.22
Anxiolytics	0.99	0.96–1.02	0.57
Antidepressants	0.95	0.92–0.99	0.007
Transient delirium	0.38	0.18–0.83	0.02

Jubran et al., 2010

FAZIT – EIN BEDEUTENDES SPANNUNGSFELD

Patienten immer länger bewusst unter Beatmung



Erleben beeinflusst Outcomes der Beatmung

EINBLICKE IN DAS ERLEBEN

META-SYNTHESE

Sterr *et al. Critical Care* (2025) 29:105
https://doi.org/10.1186/s13054-025-05326-6

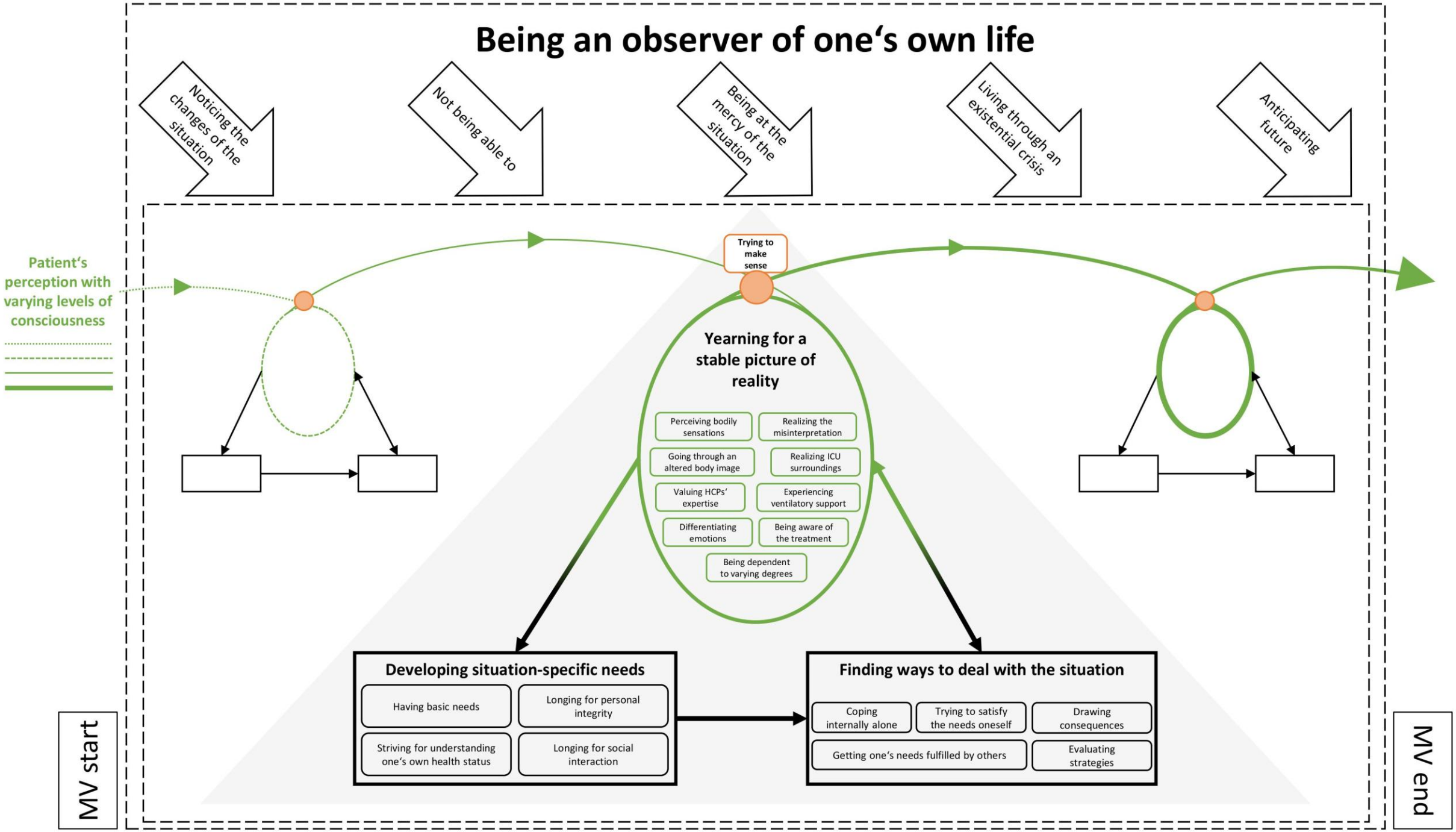
Critical Care

REVIEW

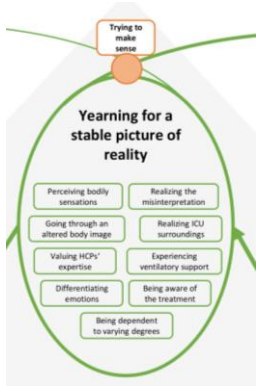
Open Access

Being an observer of one's own life—a meta-synthesis on the experience of mechanically ventilated patients in intensive care units

Fritz Sterr[1,2*], Mareike Hechinger[2], Lydia Bauernfeind[2], Christian Rester[2], Rebecca Palm[1,3] and Sabine Metzing[1]


Being an observer of one‘s own life
Noticing the changes of the situation
Not being able to
Being at the mercy of the situation
Living through an existential crisis
Anticipating future
Patient‘s perception with varying levels of consciousness
Trying to make sense
Yearning for a stable picture of reality
Perceiving bodily sensations
Realizing the misinterpretation
Going through an altered body image
Realizing ICU surroundings
Valuing HCPs‘ expertise
Experiencing ventilatory support
Differentiating emotions
Being aware of the treatment
Being dependent to varying degrees
Developing situation-specific needs
Having basic needs
Longing for personal integrity
Striving for understanding one‘s own health status
Longing for social interaction
Finding ways to deal with the situation
Coping internally alone
Trying to satisfy the needs oneself
Drawing consequences
Getting one‘s needs fulfilled by others
Evaluating strategies
MV start
MV end

HIN ZUM STABILEN BILD DER REALITÄT



1) Die Missinterpretation realisieren

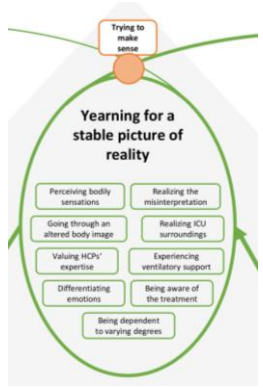
or less conscious [40, 41, 45, 47, 48, 51, 58]. Gilder [45] describes this state as "emerging from the fog", whereas Ballard [41] calls it "back and forth between reality and the unreal". It is challenging for patients under MV to

terpreting communication: "They said that old man was very critically ill and there was no hope for his survival and we did not think that he would be detached from the device once again. I thought they were talking about me, my heart palpations increased."

2) Die eigene Situation wahrnehmen

Intensivstation	Beatmungs-unterstützung	Verändertes Körperbild	Abhängigkeit	Behandlung	Gesundheits-fachpersonen
Lautstärke	Tubus	Kraftlosigkeit	Körperliche Restriktionen	Medikation	Kompetenzen
Geräte	Beatmungsmodi	Veränderte Stimme	Kontrollverlust	Aufgaben von Geräten	Haltung
Arbeitsroutinen		Keine Aufgabe, Rolle			Erwartungen

HIN ZUM STABILEN BILD DER REALITÄT



Eigene Emotionen differenzieren

Unfähigkeit –
Überwältigt sein

they manage to organize these impressions. Specifically, patients experience anxiety [40–42, 44–48, 51, 52, 54, 56–59], frustration [41, 48–52, 54, 59], stress [41–43, 46, 51] or loneliness [40, 41, 47, 49, 54, 57–59]. They feel vulnerable [41, 42, 44, 47, 51, 55, 58, 59], desperate [40, 47] or full of panic [42, 44, 51, 52, 54, 58]. However, they also feel happy [44, 45, 47], hopeful [40, 43, 45, 47, 52, 53, 56, 58, 59], grateful [41, 44, 46, 52–54] or secure [44, 46, 47,

2) Die eigene Situation wahrnehmen

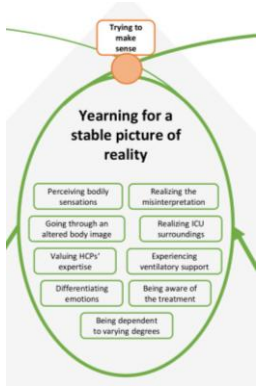
Warum habe ich diese?

Wo sind diese genau?

Körperliche Empfindungen

- Wärme
- Kälte
- Schmerzen
- Darm-aktivität
- Harn- und Stuhldrang
- Beatmet werden
- Müdigkeit
- Kraftlosig-keit

HIN ZUM STABILEN BILD DER REALITÄT



1) Die Missinterpretation realisieren

Hypothesen bilden

Auf eigenes Wissen zurückgreifen

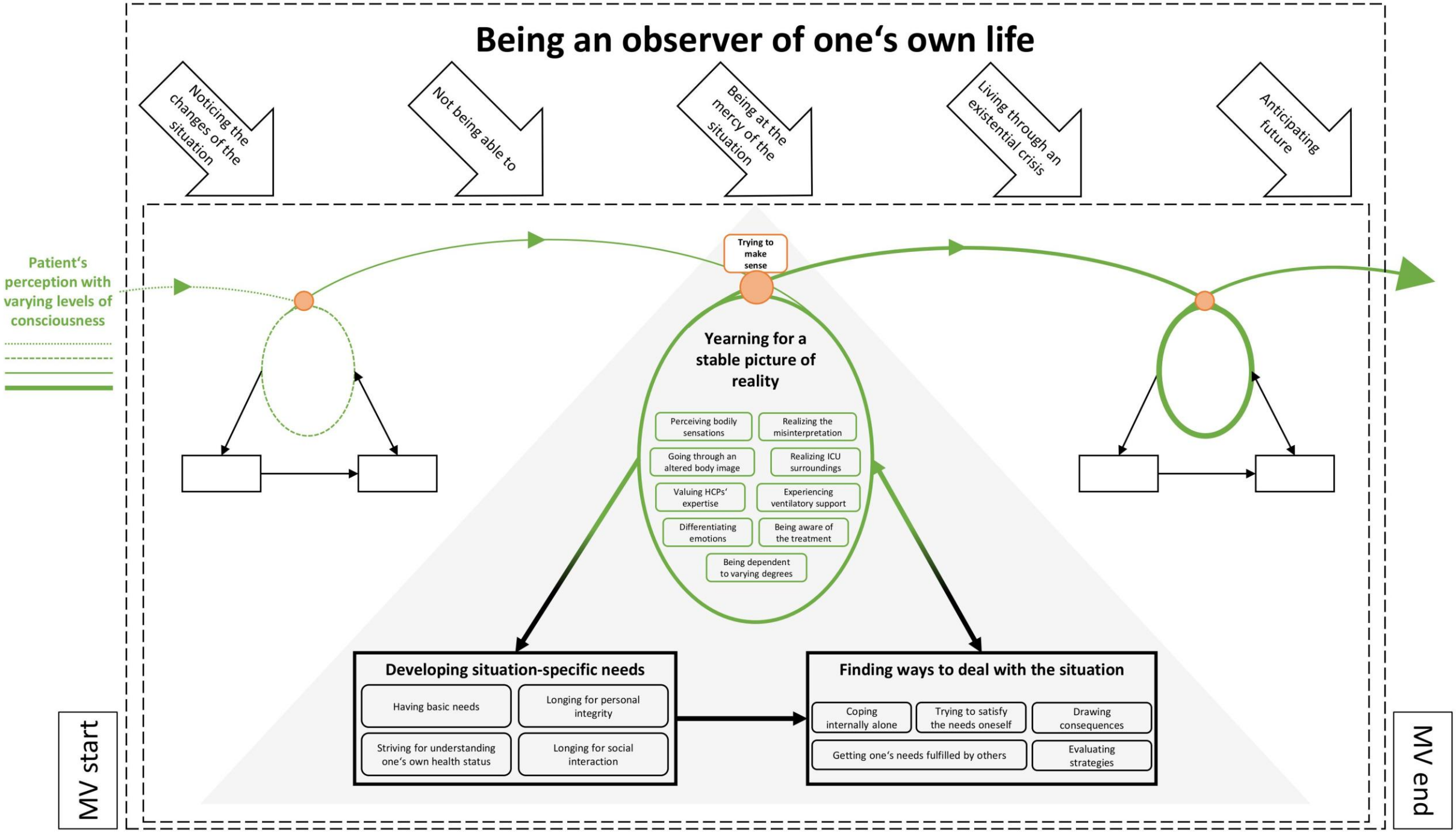
2) Die eigene Situation wahrnehmen

Erklärungen aus der Selbstwahrnehmung ableiten

patient stated: "When I woke up, I did not know where I was. First, I thought I slept on the furniture of our home. Gradually, I realized that here is somewhere else. I could not move at all. I thought I had a myocardial infarction because my tongue got numb and I could not talk. I realized that a tube had been put in my mouth" [40].

3) Sinn finden

Abhängig von:
- Verfügbare Informationen
- Eigene Verarbeitungsfähigkeit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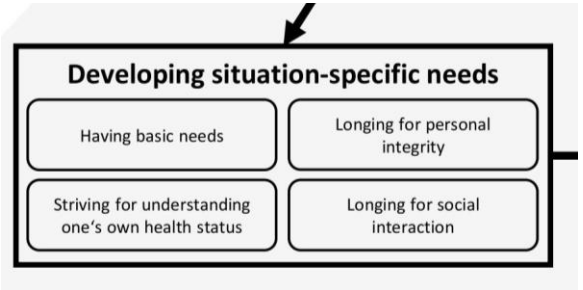
Longing for social interaction
Finding ways to deal with the situation
Coping internally alone
Trying to satisfy the needs oneself
Drawing consequences
Getting one‘s needs fulfilled by others
Evaluating strategies
MV start
MV end

ZENTRALE BEDÜRFNISSE



Basic needs

- Körperpflege
- Eigenständige Atmung
- Nahrungsaufnahme
- Entspannung und Schlaf

Den eigenen Gesundheitsstatus verstehen

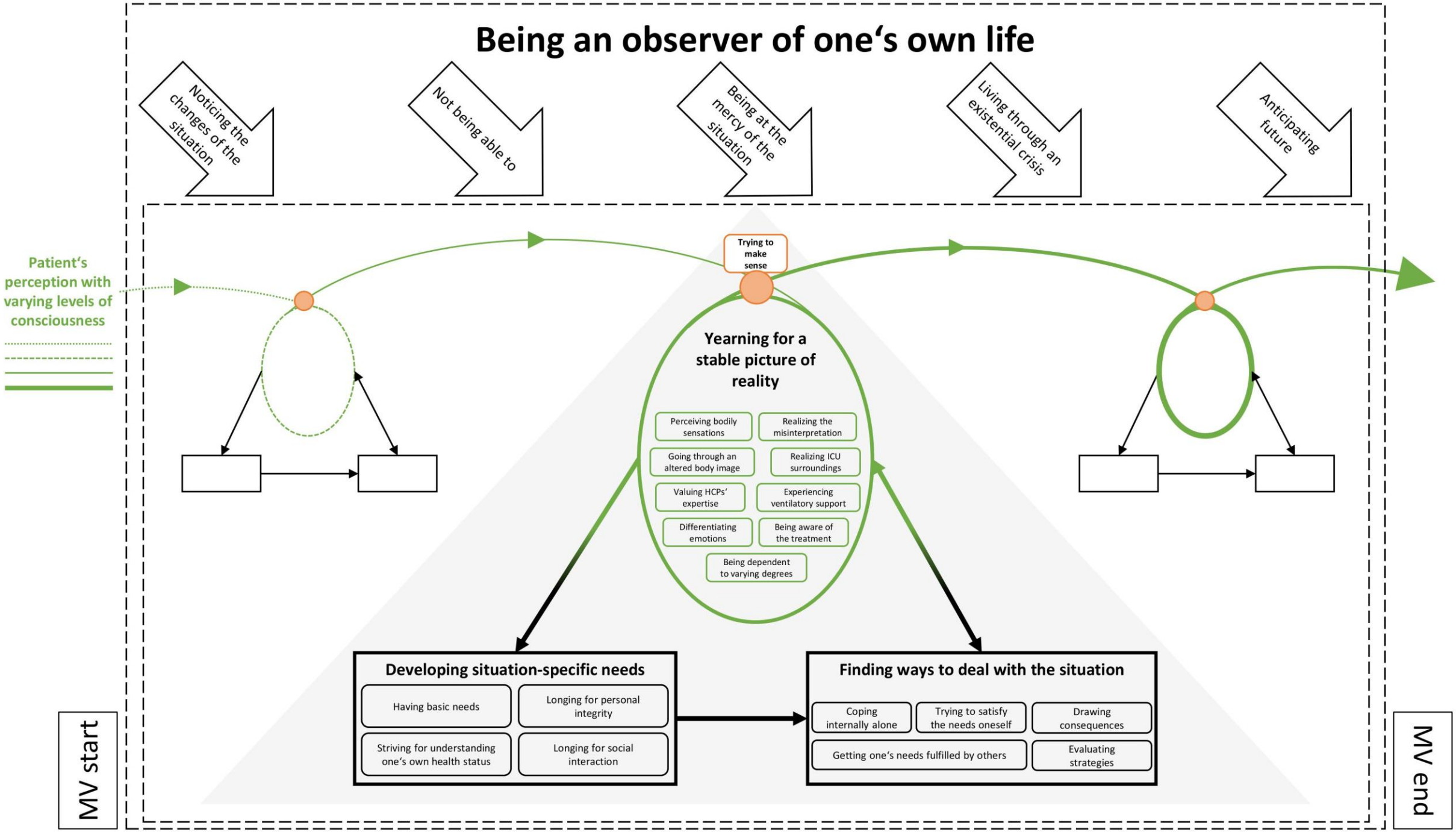
- Informationsbedarf
- Regelmäßige Kommunikation
- Detailwissen

Persönliche Integrität

- Aufrechterhaltung von Normalität
- Privatsphäre
- Unabhängigkeit und Kontrolle

Soziale Interaktion

- Mit verschiedenen Personen (Familie, Gesundheitsfachpersonen)
- Regelmäßige Besuche
- Einbettung der Angehörigen in Versorgung


Being an observer of one‘s own life
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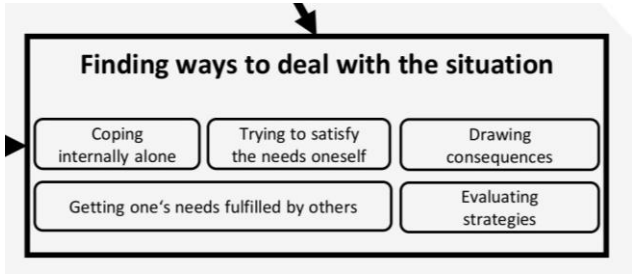
UMGEHEN MIT DER SITUATION



Mit Situationen konfrontiert sein, denen kein Bedürfnis vorausging

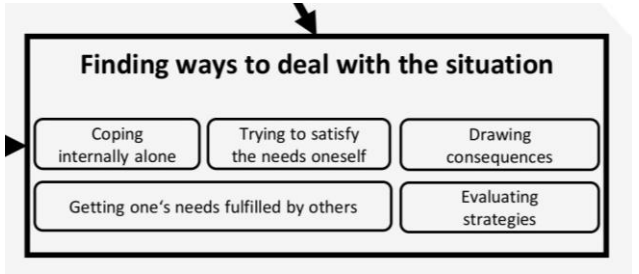
- Gesundheitsfachpersonen reden hören
- Übelkeit haben
- Halluzinationen oder Albträume erleben

or their condition [43, 46, 47, 51, 53]. "I think the best way is once you've had it done once and you know you've gotta have it done a second time is just to grin and bear it, really attack it mentally otherwise it'd just bloody drive you crazy" [43].

Umgangsstrategien finden

- Nachdenken und reflektieren
- Andere Gespräche und Informationen auf sich beziehen
- Aushalten müssen und lernen

UMGEHEN MIT DER SITUATION



Bedürfnisse selbst befriedigen wollen

Aktives sich verhalten, das mehr oder weniger selbständig erfolgt

- Sich Katheter ziehen (wegen Schmerzen, Discomfort)
- Gesundheitsfachpersonen unterstützen (Positionierung, Absaugen)
- Durchhalten lernen, sich mental stärken

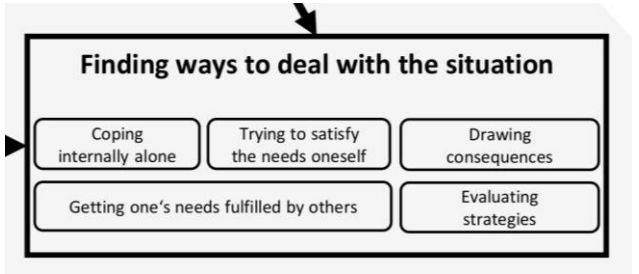
58]. Holm [50] cites an interviewee who reflects: "Well of course it [the tube] is unpleasant to have, it's no joyride, you know. But when one day had passed, I thought – well then it can stay there for a couple of days more. And when you have managed that, then you can do it."

Bedürfnisse durch andere gestillt bekommen

- Gepflegt werden
- Abgesaugt werden
- Unterstützung in der Kommunikation erfahren
- Abgelenkt werden

58]. "I wasn't forced to think about the illness continually when she [relative] was with me" [44].

UMGEHEN MIT DER SITUATION



Umgangsstrategien evaluieren

Patienten reflektieren, wie sehr erfolgte Maßnahmen ihre Bedürfnisse gestillt haben.

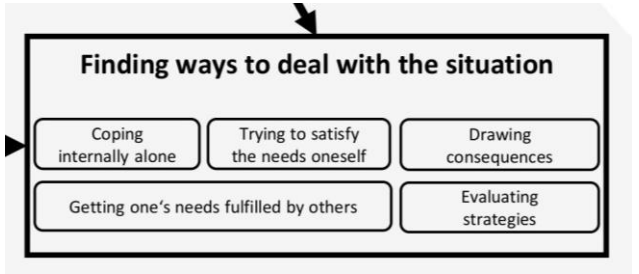
Dabei wägen sie ab, da Situationen für sie komplex und nicht eindimensional sind.

Weniger **Mehr**

ous interpretations occur simultaneously. For example, patients reported that they experienced pain and nausea from endotracheal suction [48, 51, 53, 58], but that this also provided considerable relief to their breathing [53,

58]. Visiting as an overall positive intervention relieves loneliness and pain [40, 44, 47, 58, 59], and reassures patients [47, 55, 58] but might also trigger discomfort when distant relatives are present [47].

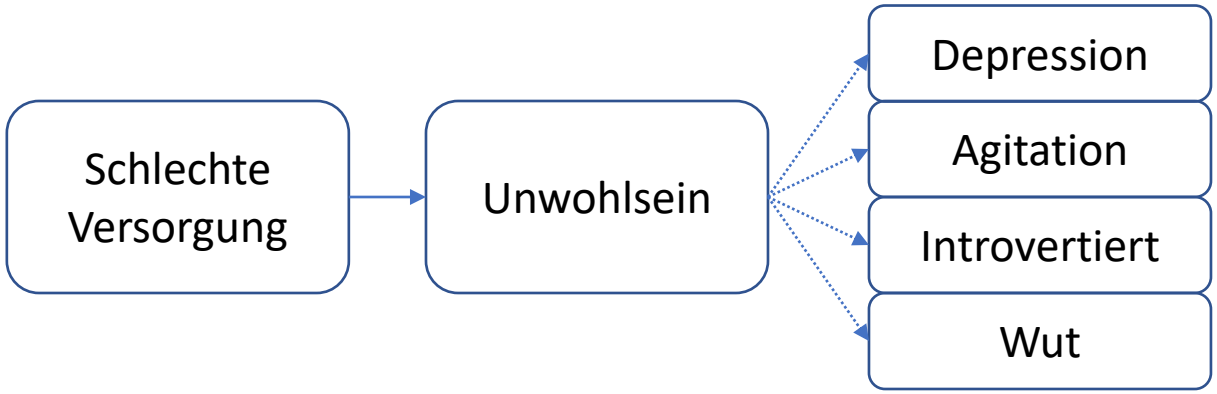
UMGEHEN MIT DER SITUATION



Konsequenzen ableiten

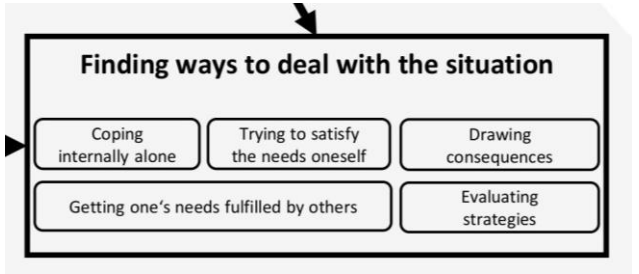
- Eigene Vorannahmen werden beibehalten oder verworfen
- Das eigene Bild und Verständnis der Situation wird erweitert und umfassender
- Daraus leiten sich weitere Handlungen ab

Diese Handlungen folgen einem typischen Aktions-Reaktions-Prinzip:



and needs [50, 53, 54, 57]. A patient explained why he no longer communicated with HCPs: "It didn't make any difference. They were going to hear what they wanted to hear" [46]. Another patient describes that he no longer resisted suctioning: "So I ended up I gave up. What did it matter how I felt?" [51]

UMGEHEN MIT DER SITUATION



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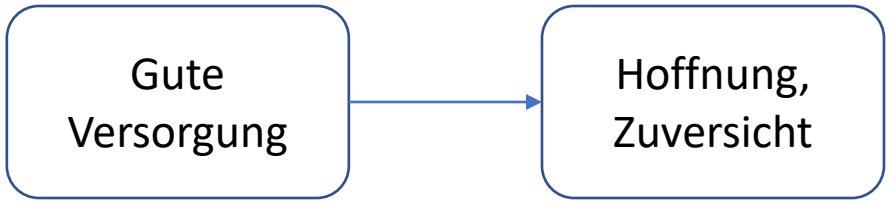
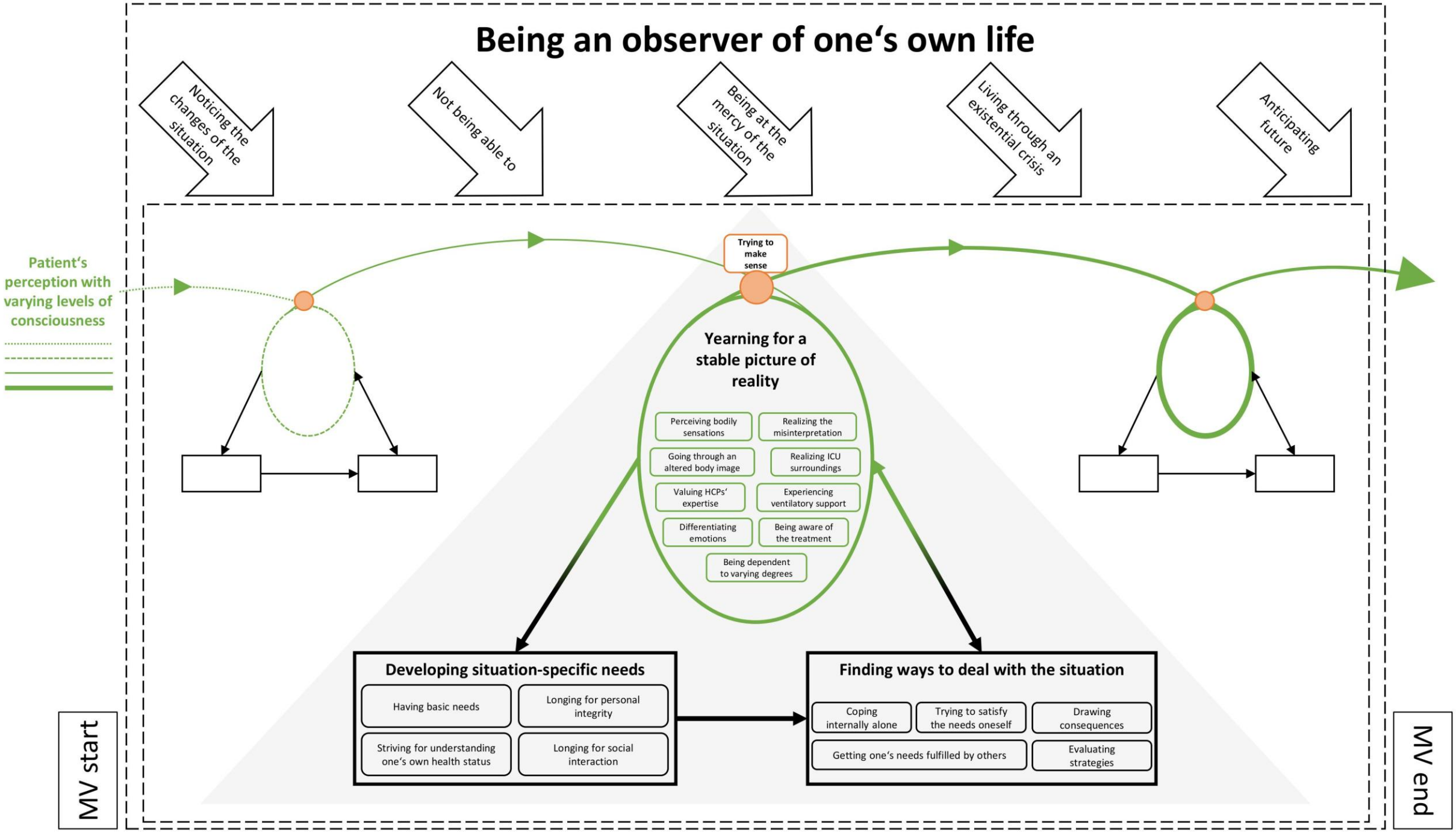


from relatives [40, 47, 52, 57, 59]. "The presence of support people could give me hope. I was really encouraged. [...] I thought that I was good, so my doctor had let my kids come and visit me. I became hopeful" [47]. Patients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MV start
MV end

VIELEN DANK! ☺

Sie haben Fragen, Ideen, Rückmeldungen?

Melden Sie sich gerne jederzeit! ☺

Fritz Sterr

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LITERATUR

- Ahlers, S. J., van der Veen, A. M., van Dijk, M., Tibboel, D., & Knibbe, C. A. (2010). The use of the Behavioral Pain Scale to assess pain in conscious sedated patients. *Anesthesia and analgesia*, *110*(1), 127–133. https://doi.org/10.1213/ANE.0b013e3181c3119e
- Akgün, D., & İnal, S. (2022). Pain intensity of sedated paediatric intensive care unit patients during treatment and care procedures. *Nursing in critical care*, *27*(5), 658–666. https://doi.org/10.1111/nicc.12636
- Deutsche Gesellschaft für Anästhesiologie und Intensivmedizin (2021). S3-Leitlinie Analgesie, Sedierung und Delirmanagement in der Intensivmedizin (DAS-Leitlinie 2020). https://register.awmf.org/de/leitlinien/detail/001-012, Zugriff am 16.06.2025
- Esteban, A., Ferguson, N. D., Meade, M. O., Frutos-Vivar, F., Apezteguia, C., Brochard, L., Raymondos, K., Nin, N., Hurtado, J., Tomicic, V., González, M., Elizalde, J., Nightingale, P., Abroug, F., Pelosi, P., Arabi, Y., Moreno, R., Jibaja, M., D'Empaire, G., Sandi, F., … VENTILA Group (2008). Evolution of mechanical ventilation in response to clinical research. American journal of respiratory and critical care medicine, 177(2), 170–177. https://doi.org/10.1164/rccm.200706-893OC
- Frölich, M. A., Zhang, K., & Ness, T. J. (2013). Effect of sedation on pain perception. *Anesthesiology*, *118*(3), 611–621. https://doi.org/10.1097/ALN.0b013e318281592d
- Herber, O. R., & Barroso, J. (2020). Lessons learned from applying Sandelowski and Barroso's approach for synthesising qualitative research. *Qualitative Research*, *20*(4), 414–431. https://doi.org/10.1177/1468794119862440
- Jubran, A., Lawm, G., Kelly, J., Duffner, L. A., Gungor, G., Collins, E. G., Lanuza, D. M., Hoffman, L. A., & Tobin, M. J. (2010). Depressive disorders during weaning from prolonged mechanical ventilation. Intensive care medicine, 36(5), 828–835. https://doi.org/10.1007/s00134-010-1842-4
- Mattle, H., & Fischer, U. (2021). Störungen der Wachheit und des Bewusstseins. In H. Mattle, U. Fischer (Hrsg.), *Kurzlehrbuch Neurologie* (5. Auflage). Thieme. S. 121-123.
- Salam, A., Tilluckdharry, L., Amoateng-Adjepong, Y., & Manthous, C. A. (2004). Neurologic status, cough, secretions and extubation outcomes. *Intensive care medicine*, *30*(7), 1334–1339. https://doi.org/10.1007/s00134-004-2231-7
- Sandelowski, M., & Barroso, J. (2007). *Handbook for Synthesizing Qualitative Research*. Springer Publishing Company.
- Sosnowski, K., Lin, F., Chaboyer, W., Ranse, K., Heffernan, A., & Mitchell, M. (2023). The effect of the ABCDE/ABCDEF bundle on delirium, functional outcomes, and quality of life in critically ill patients: A systematic review and meta-analysis. *International journal of nursing studies*, *138*, 104410. https://doi.org/10.1016/j.ijnurstu.2022.104410
- Sterr, F., Hechinger, M., Bauernfeind, L., Rester, C., Palm, R., & Metzing, S. (2025). Being an observer of one's own life-a meta-synthesis on the experience of mechanically ventilated patients in intensive care units. *Critical care (London, England)*, *29*(1), 105. https://doi.org/10.1186/s13054-025-05326-6