

## **A 1-Day Point Prevalence Study about Delirium**

**Dear colleague**

**Thank you very much for participation in the worldwide one-day point prevalence study during the World Delirium Awareness Day March 15th 2023.**

**On the next pages you will find the survey. We are asking for some personal data such as country, years of experience, discipline, but moreover for current delirium-related structures and processes on your unit/ward.**

**The main question is: how many patients on your unit/ward are delirious at 8 a.m. in the morning and 8 p.m. in the evening on March 15th? We beg you to ask other clinicians and/or check the charts to be most accurate on this question. There will be more questions and information in the survey, of course.**

**The survey includes 39 questions and will take 15 minutes approximately. The survey is anonymous, and your participation is voluntary. You can stop your participation whenever you want. There is no chance to identify your personality or of your patients. The survey has been registered, has an ethic approval, and is based on the European law of data protection. These rights are reported in detail on the next page. Nevertheless, before performing the study, be sure that the national collaborator informed you about the legal requirements of the ethic approval and data protection in your country and health care setting. At the end of the survey, we will be asking you if you would like to be acknowledged!**

**By participating in this survey, you agree with these terms and conditions.**

**Thank you!**

**The study team Rebecca von Haken, Peter Nydahl, Heidi Lindroth, Keibun Liu, and all national collaborators**

## Data protection

**The survey follows the European Union's General Data Protection Regulation (GDPR). Participants have the rights**

### **Right for information**

**You have the right for information about the personal data concerning you that will be collected, processed or, if necessary, transmitted to third parties within the framework of this project and to hand over a free copy (Article 15 GDPR).**

### **Right to rectification**

**You have the right to correction of inaccurate personal data concerning you (Articles 16 and 19 GDPR).**

### **Right to erasure**

**You have the right to erasure of personal data concerning you if this is possible (e.g. if this data is no longer necessary for the purpose for which it was collected and this is not precluded by any retention obligations (Articles 17 and 19 GDPR).**

### **Right to restriction of processing**

**Under certain conditions, you have the right to demand a restriction of processing, i.e. the data may only be stored, not processed. You must apply for this. Please contact the project management (Articles 18 and 19 GDPR).**

### **Right to data portability**

**You have the right to receive the personal data concerning you that you have provided to the person responsible for the project. You can request that this data be transmitted either to you or, as far as technically possible, to another body notified by you (Article 20 GDPR).**

### **Right to object**

**You have the right to object at any time to specific decisions or measures regarding the processing of your personal data (Art. 21 GDPR, § 36 BDSG-new). Such processing does not take place afterwards.**

### **Consent to the processing of personal data and right to withdraw this consent**

**The processing of your personal data is only lawful with your consent (Article 6 GDPR). You have the right to withdraw your consent to the processing of personal data at any time.**

### **Right to lodge a complaint with the competent supervisory authority for data protection**

**If you would like to exercise one of these rights, please contact the responsible project management or the data protection officers of the research team involved.**

**Contact: in case you want to use any of these rights, please contact the principal investigator Dr. Rebecca von Haken (Rebecca.vonHaken@umm.de) or the representative of the department of data protection in the University Hospital Mannheim (datenschutzbeauftragter@umm.de).**

\* 1. By clicking the box below; I confirm that I understood the above text

Yes, I confirm

Please consider if you fulfill the inclusion criteria

**Inclusion criteria:**

**I am working as a leading health care worker or representative (such as senior physician, physician in charge, nurse leader, nurse in charge, nurse- or unit/ward manager or similar professionals) in a health care setting with patients of all age groups, such as units/wards in hospitals and facilities including Emergency Department, Intensive Care Units, Intermediate Care Units, palliative units, wards, weaning centers, rehabilitation centers, or nursing homes. Included are all age groups (paediatric, adult, geriatric).**

**Exclusion criteria:**

**Former patients, family member or clinicians working in an ambulatory care service, or operation theatre.**

2. By clicking on the button ...

- I confirm that I am fulfilling the inclusion criteria above
- I do not fulfil the inclusion criteria (ending survey)

## Security

**To avoid multiple participants from single ward or units, we ask you for the name of the city and the name of the ward/unit, where you are collecting data. These data will not be part of the main data evaluation and will be kept confidentially and not forwarded to others. These data will be kept for three months on the server of the survey, and deleted afterwards**

3. What is the name of the city, where the hospital is located, e.g. "Hamburg"

4. What is the official name of your ward or unit (no nicknames, please), e.g. "C114"?

## Sociodemographic data

5. What is your profession? (There are a lot of different professions and qualification in health care; please tick this profession which is closest to your own profession)

- Assistant (any type, e.g. unit assistant, nurse assistant, rehab assistant ...)
- Lecturer
- Manager
- Nurse
- Nutritionist/Dietician
- Occupational Therapist
- Pharmacist
- Physician
- Physical Therapist
- Researcher
- Respiratory Therapist
- Speech and Swallow Therapist
- Technician
- Other

6. Are you in a leading position on your unit/ward?

- Yes
- Yes, partly
- No
- No, but I am completing this survey on behalf of someone else
- Do not know/Unsure

7. What is the number of years of clinical experience on your unit/ward?

- <5
- <10
- <15
- <20
- $\geq 20$  years

## Hospital data

**Please, provide the following data about the hospital you are working in ...**

8. Please select the country where the hospital is located

Other (please specify)

9. Please provide the number of beds in your hospital

- <250
- <500
- <750
- <1000
- <1500
- $\geq 1500$

10. Type of hospital

- University hospital
- University-related/affiliated hospital
- Community hospital
- Nursing home
- Rehabilitation center
- Private hospital
- Others

## Unit/ward data

### Please provide following information about your Unit/ward

11. The majority (> 75%) of your patients belong into following age group

- 0-17 years
- 18-75 years
- >75 years
- Mixed

12. The discipline you are working, can be described as...

- Medical/non-surgical
- Surgical
- Palliative
- Respiratory/weaning
- Rehabilitation
- Long care
- Mixed/general
- Other

13. The ward or Unit you are working is ...

- Emergency Department
- General Ward
- High acuity, Intermediate Care, or Intensive Care Unit
- Rehabilitation Facility
- Nursing Home
- Other

14. Please report the number of beds on your unit/ward in full numbers (e.g. "12")

15. Do you have written protocols for (tick all that apply) ...

- Pain management (assess, prevent and manage pain)
- Spontaneous Awakening Trial (SAT) management
- Spontaneous breathing trial (SBT) management
- Sedation management
- Delirium management (assess, prevent and manage Delirium)
- Dementia
- Mobility and exercise
- Family engagement and empowerment
- Nutrition management
- Sleep
- Physical restraint
- ICU Diaries
- None of the above
- Other (please specify)

## Delirium related structures and processes

**Please, provide all delirium related structures and processes**

16. Do you provide delirium-awareness-interventions on this ward/unit (tick all that apply)

...

- At least one educational training about delirium in the last year
- Delirium flyer for the staff
- Delirium is mentioned in handovers
- Pocketcards for delirium assessment/management
- Informational Posters about delirium
- Delirium experts, known by the team and dedicated for delirium care
- Communication of delirium screening rate on your unit/ward
- None
- Other (please specify)

17. Delirium Assessment: What type of delirium assessment do you use on this ward/unit?  
(In case of multiple assessment, tick all that apply)...

- Personal judgement
- 3DCAM
- 4AT
- bCAM
- CAM
- CAM-ICU
- CAMICU-7
- DTS
- DSM-IV criteria
- DSM-V criteria
- DSM-VI criteria
- ICDS
- NU-DESC
- SQID
- UB2
- PAED Scale
- CAP-D
- SOS-PD
- pCAM-ICU
- psCAM-ICU
- sspCAM-ICU
- Psychiatric consult
- None
- Other (please specify)

18. How often is delirium assessed?

- Once per day (24h)
- Twice per day (24h)
- Thrice per day (24h)
- More than thrice per day (24h)
- Only at admission
- Only in case of sudden changes of consciousness (withdrawn, agitation, disorientation, inappropriate behavior)
- Other (please specify)

19. Who is the profession, who is primarily responsible for daily delirium assessment?

- Nurse
- Physician
- Psychiatrist
- Geriatrician
- Specific delirium team (composed of multidisciplinary team)
- Mixed professions
- None
- Other

Delirium prevalence on March 15th 2023 in the morning

**Delirium data at March 15th 2023 at 8 a.m. in the morning (if not exactly feasible, at least close to this timepoint including +/- 4 hours)**

**We would like to know the delirium rate on your unit/ward. Please check the charts/records and/or ask responsible clinicians to be most accurate. Please enter full numbers (e.g. "4"), no range or percent**

20. **Total patients:** How many patients were present on the ward/unit in the morning at 8 a.m.?

21. **Assessed patients:** How many patients were assessed for delirium by using the above reported assessment?

22. **Delirious patients:** How many patients were assessed positive for delirium by using the above reported assessment?

23. **Non-delirious patients:** How many patients were assessed free of delirium by using the above reported assessment?

24. **Not assessable/unclear patients:** How many patients **were not assessable** for delirium (e.g. comatose, sedated, disturbed consciousness, too sleepy, away for procedures, aphasic, different language, or else) **and/or had unclear results** by using the above reported assessment (e.g. unclear care of delirium superimposed on dementia/depression, or else)?

WDAD Prevalence rate in the evening

**Delirium data at March 15th 2023 at 8 p.m. in the evening (if not exactly feasible, at least close to this timepoint including +/- 4 hours)**

**We would like to know the delirium rate on your unit/ward. Please check the charts/records and/or ask responsible clinicians to be most accurate. Please enter full numbers (e.g. "4"), no range or percent**

25. **Total patients:** How many patients were present on the ward/unit in the evening at 8 p.m.?

26. **Assessed patients:** How many patients were assessed for delirium by using the above reported assessment?

27. **Delirious patients:** How many patients were assessed positive for delirium by using the above reported assessment?

28. **Non-delirious patients:** How many patients were assessed free of delirium by using the above reported assessment?

29. **Not assessable/unclear patients:** How many patients **were not assessable for delirium** (e.g. comatose, sedated, disturbed consciousness, too sleepy, away for procedures, aphasic, different language, or else) **and/or had unclear results** by using the above reported assessment (e.g. unclear care of delirium superimposed on dementia/depression, or else)?

30. Please report all types of health care professions who were present at your ward/unit today at March 15th, even if only for a few moments (tick all who apply)

- Assistants/Service
- Nurses
- Nutritionist/Dietician
- Occupational Therapist
- Pharmacist
- Physician
- Physical Therapist
- Priest/religious Support
- Psychologists/Psychiatrist
- Respiratory Therapist
- Speech and Swallow Therapist
- Technician
- Other

## Non-pharmacological prevention and treatment

31. Do most patients (>50%) on your unit/ward receive routine non-pharmacological interventions (at least once per shift) for delirium prevention and treatment? (Click all that apply)

- Mobilization (sitting on the edge of bed or more, daytime)
- Pain management
- Bed boarder
- Physical restraints (e.g. on wrists and others)
- Provision of day- and night rhythm
- Adequate fluids
- Provision of vision- and hearing and mobility aids
- Cognitive stimulation, e.g. provision of newspapers, TV, music, other
- Verbal re-orientation
- Open or liberal visiting times for families (daytime)
- Non-disturbed sleep (i.e., reduction of noise and light)
- Ear plugs, sleep glasses
- Family information
- Family engagement
- Sitters (beside the patient for longer time, mostly over hours)
- Multi-professional team rounds
- Avoidance of bladder tubes/catheters
- Multi-professional daily goals
- Sharing or communicating patient information about delirium
- Ground-leveled beds
- Activities in patient groups, e.g. singing, eating, doing exercises together, other
- Animal assisted therapy
- Going "outside" the unit/ward, eg hospital hall, garden, sunlight
- Special trained delirium/dementia carer
- Other (please specify)

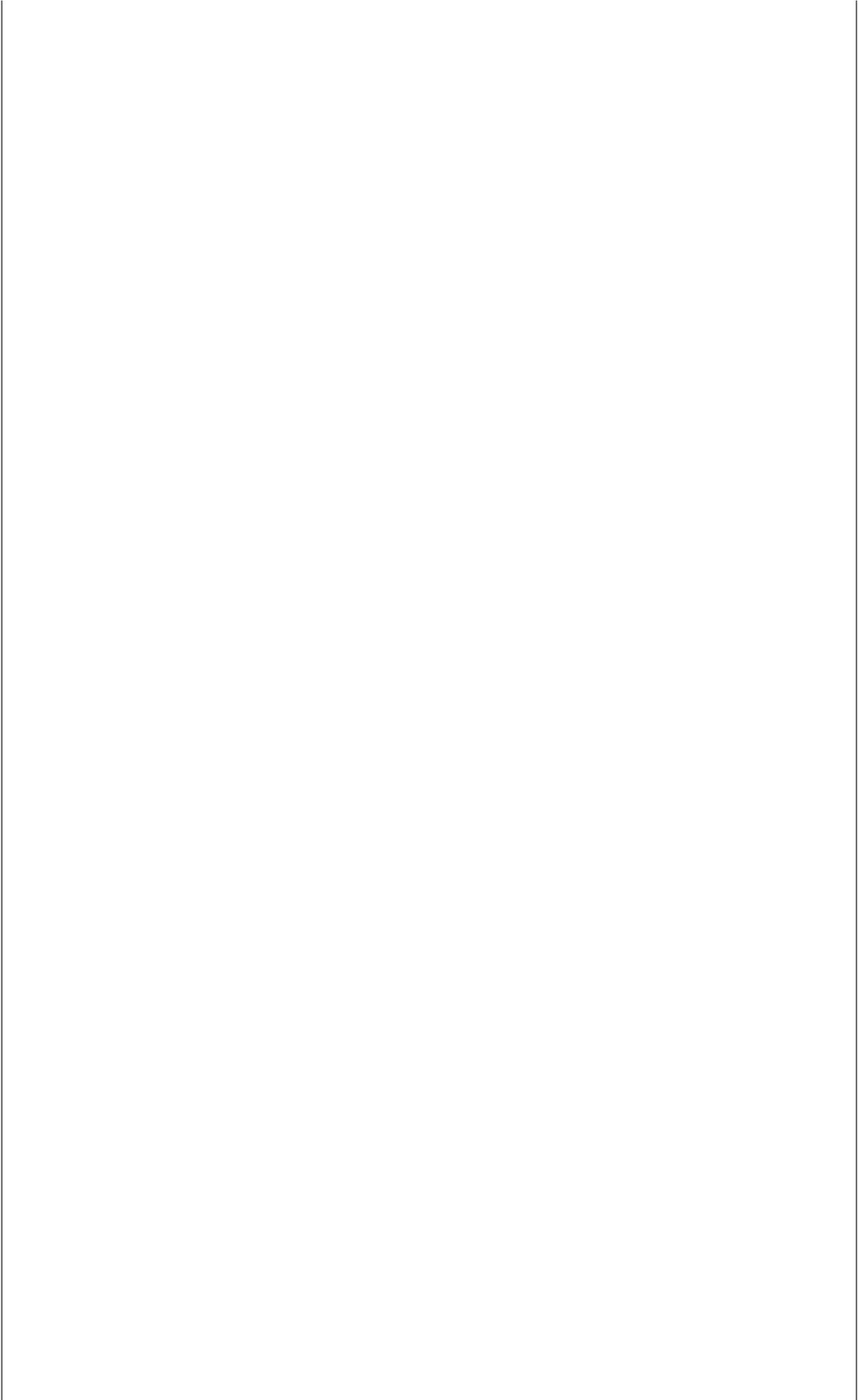
## Pharmacological treatment

32. Do most delirious patients (>50%) of your unit/ward receive pharmacological interventions? (Click all that apply)

- Haloperidol
- Clonidine
- Melperone
- Risperidone
- Lorazepam
- Dexmedetomidine
- Diazepam
- Quetiapine
- Midazolam
- Distraneurin
- Melatonin
- Beta-blocker
- Levodopa
- Phenobarbital
- Reduction of potentially delirogenous drugs
- Evaluation of drugs by a specialist (e.g. geriatrician, pharmacists, or else)
- Do not know
- Other (please specify)

33. In general, the pharmacological management on my ward/unit of patients in delirium ... (click all that apply)

- Is based on a standard operation procedure (SOP), or protocol
- Includes pharmacologists
- Includes psychiatrist or delirium specific liaison team
- Is a more general approach, including a few pharmacological agents
- Is a more individual approach, depending on patients, and side effects
- Depends on specific symptoms of each patient's delirium
- Is discussed with patients in most cases
- Is discussed with families in most cases
- Is reported in handovers
- Includes recommendations for withdrawal of delirium-related drugs
- None of the above
- Other (please specify)



## Barriers

34. On this unit/ward, barriers against implementation and/or use of evidence-based strategies are ... (Click all that apply)

- Lack of time to educate and train staff
- Lack of awareness
- Shortage of personnel/staff
- No cost/resources for promoting at the department
- Missing knowledge about delirium (i.e., treatment, assessment, etc.)
- Communication gaps between professions
- Missing attitude, delirium is not important
- Not enough motivated staff
- Leadership does not support
- Lack of non-pharmacological interventions
- Lack of pharmacological interventions
- No appropriate scores for assessment of delirium
- Patients who are difficult for assessment (dementia, dying, prematured)
- Other problems are more challenging
- Inter-professional conflicts
- We have no barriers, delirium is regularly assessed, delirium-management is implemented, we go ahead
- Other (please specify)

## The next steps...

35. In your opinion, what should be high priority for **delirium care** in the future? (free text)?

36. In your opinion, what should be high priority for delirium research in the future? (free text)?

37. Would you like to add any comments (free text)?

## Final page

**Thank you very much. You are almost done.**

### 38. Optional code for sub-analysis

In case, you pre-registered sub-analyses, please enter here the code you received, and report your data in the acknowledgement below.

Code

### 39. Your personal data

If you would like to be acknowledged personally, we would be happy to include your name in an acknowledgement in future publications. If so, please enter your name, degrees, hospital, and email address (example: Dr. Peter Nydahl, University Hospital Schleswig-Holstein, Kiel, Germany. Peter.Nydahl@uksh.de)

These data addresses will be handled confidentially and not forwarded to third parties. Only the research team will have access to these data. These data will be stored on the server of the survey for three months after the survey (June 15th, 2023), and deleted afterwards. The data will be used for publication, to acknowledge your contributions. Participation is voluntary. By entering your personal data, you agree to this approach.

Your full Name (e.g. "Peter Nydahl")

Your highest scientific degrees (e.g. "Dr.")

Your hospital, city and country (in case of multiple affiliations: use only one, please, e.g. "University Hospital, Kiel, Germany")

Your email address (e.g. "Peter.Nydahl@uksh.de")