

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 13th 2024.

You have to enter the data in one session. At the end of the survey you can click on a "finish" button. If you interrupt data entry, you might have to start from the beginning again.

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 on March 13th? 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 36 questions and will take 17 minutes approximately. The survey is anonymous, and your participation is voluntary. There is no chance to identify your personality, unless you want to be acknowledged for participation or gain group-co-authorship in publications. There is no chance to identify patients due to the anonymous data collection. 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.

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:

Clinicians 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 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, with**
- **patients of all age groups (paediatric, adult, geriatric).**

Exclusion criteria:

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"?

5. Optional: enter your survey code, you received from your national collaborator

Sociodemographic data

6. 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
- Psychologist/Psychiatrist
- Researcher
- Respiratory Therapist
- Speech and Swallow Therapist
- Technician
- Other

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

- <5
- <10
- <15
- <20
- ≥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 (or US state) please specify

9. Please provide the number of beds in your hospital

- <250
- <500
- <750
- <1000
- <1500
- ≥ 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 or patient population, you are working with, 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
- Weaning from Mechanically Ventilation
- Spontaneous breathing trial (SBT) management
- Sedation management
- Sedation withdrawal
- Delirium management (assess, prevent and manage Delirium)
- Dementia
- Mobility and exercise
- Family engagement and empowerment
- Falls
- Nutrition management
- Isolation due to infections
- Infection bundles, e.g. sepsis
- Pressure sores
- Sleep
- Alcohol withdrawal
- Physical restraint
- ICU Diaries
- None of the above
- Other (please specify)

Delirium related resources

Please, provide all delirium related resources incl. measurements, interventions, 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 flyer for family members / parents
- Delirium documentation tools (electronically)
- Delirium educational videos
- Quick fact sheets, e.g. One Minute Wonders, one-pagers
- Delirium prognostic tools, e.g. Artificial Intelligence, Apps, Risk Models
- Delirium experts, e.g. Advanced Nursing Practitioners, known by the team and dedicated for delirium care
- Communication of delirium screening rate on your unit/ward
- The number of delirium related resources, e.g. quick fact sheets, raised in the last year on this ward/unit
- None
- Other (please specify)

17. Delirium Assessment: What type of delirium assessment do you use on this ward/unit? (just one option, the most frequent delirium assessment in routine care, you are also using on the prevalence day)...

- Personal judgement
- 3DCAM
- 4AT
- bCAM
- CAM
- CAM-ICU
- CAMICU-7
- CAM-IMC
- DOS
- DTS
- DSM-IV criteria
- DSM-V criteria
- DSM-VI criteria
- ICDS
- NEECHAN
- 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? (Tick what describes best your frequency)

- No regular assessment
- Once per day (24h)
- Twice per day (24h)
- Thrice or more per day (24h)
- Only at admission
- Only those patient who are at risk for delirium (e.g. > 65 years, after operation)
- Only at admission and only in case of sudden changes of consciousness (withdrawn, agitation, disorientation, inappropriate behavior)
- Only in case of sudden changes of consciousness (withdrawn, agitation, disorientation, inappropriate behavior)
- Only during the first 3 days for patients at risk for delirium
- Only during the first 3 days for patients at risk for delirium, plus in case of sudden changes of consciousness
- 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 13th 2024 in the morning

Delirium data at March 13th 2024 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. **Delirious patients:** How many patients were assessed positive for delirium by using the above reported assessment?

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

22. **Not assessed patients:** how many patients were not assessed (clinicians did not assess patients)

23. **Not assessable patients:** how many patients were not assessable (e.g. comatose, sedated, disturbed consciousness, too sleepy, away for procedures, aphasic, different language, or else)

24. What were the reasons for patients not being assessable for delirium?

- Being comatose
- Brain death
- Being sedated
- Disturbed consciousness
- Too sleepy
- Too agitated
- Psychosis
- Deaf/blind
- Severe cognitive impairment, e.g. severe dementia, cognitive disability
- Foreign language
- Too young (prematured)
- Neurological disorder (e.g. Aphasia, Stroke, Epilepsia, Encephalitis)
- Dying
- Other (please specify)

- None of the above

25. **Patients with unclear results: how many patients had unclear results because of the delirium assessment** (unclear presence of delirium superimposed on dementia/depression, or else)

26. What were the reasons for unclear results?

- Depression
- Dementia
- Clinician could not perform assessment in the right way (e.g. too noisy in the room, or too many distractions)
- Clinician did not had enough experience in delirium assessment
- Because of fluctuation (e.g. patient was delirious before, but now seems to be free of delirium)
- Assessment was different to my overall impression
- Other (please specify)

- None of the above

Non-pharmacological prevention and treatment

27. 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
- Optimizing individual fluid balance (e.g. calculating fluids going in and out)
- Systematic assistance with fluid (e.g. helping patients to drink)
- 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, e.g. safety attendances (beside the patient for longer time, mostly over hours)
- Video observation (e.g. tele-sitters)
- Multi-professional team rounds
- Bowel management
- Multi-professional daily goals
- Sharing or communicating patient information about delirium
- Ground-leveled beds
- Bed exit alarm
- 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

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

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

29. 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

30. 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
- High staff turnover/ foreign workers / new staff
- No cost/resources for promoting at the department
- Lack of delirium educators/trainers who teach the staff
- Lack of specialized knowledge (delirium vs. agitation, dementia, pain)
- Missing knowledge about delirium (i.e., treatment, assessment, etc.)
- Communication gaps between professions
- Missing attitude, delirium is not important
- Not enough motivated staff
- Environment
- 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)
- Small wards/units with few cases of delirium
- 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...

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

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

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

Would like to be acknowledged or gain group-co-authorship?

Please answer the question below and let us know, if you would like to be acknowledged or gain group-co-authorship?

Conditions for Acknowledgement: participation in the study + collecting patient and/or ward/unit data

Conditions for Group-Co-Authorship: participation in the study + collecting data of more than 100 patients

In case of unusual data, we might ask you for confirmation and/or request original data

34. I want ..

- ...to participate, but be **anonymous** (no acknowledgement, no group-co-authorship)
- ... to participate and want to be **acknowledged** (my name & affiliation will be reported at the end of a publication in a paragraph "acknowledgement")
- ... to participate and want to **group-co-authorship**, with my name tagged to the publication and reported in a paragraph in the paper, but not reported on the title of the paper (my name & affiliation will be reported at the end of a publication in a paragraph "group-co-authorship")

35. In case of acknowledgement or group-co-authorship, please enter your data

Your full name (e.g.
Peter Nydahl)

Your department (e.g.
Department of
Nursing Research)

Your insitution (e.g.
University Hospital of
Schleswig-Holstein)

Your city (e.g. Kiel)

Your email (e.g.
Peter.Nydahl@uksh.d
e)

Final page

Thank you very much. You are almost done.

36. Please confirm data completeness.

- Yes, all answers are complete, the survey is finished
- No, the survey is not finished (in this case, go back and enter data. Otherwise, your answers cannot be saved)