The COVID-19 Social Monitor – Monitoring the Social and Public Health Impact of the Pandemic

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COVID-19 Social Monitor: Objectives

− Timely monitoring of the broader impact of the Covid19 pandemic on relevant social and public health domains
  − to inform the public and health authorities
  − to allow for analyses of changes in outcomes, individual trajectories, group differences, impact of public health measures, etc.

− Focus on
  − individual well-being and quality of life
  − psychological stress
  − social and physical activities
  − health and health services use
  − work

− Goal (in April 2020): Keep surveying until the end of the pandemic…
COVID-19 Social Monitor: Methods

- Repeated (online) survey of a randomly selected cohort from an existing online panel population (LINK panel)
- Stratified sample, covering all of Switzerland
- Questionnaire in German, Italian, French
COVID-19 Social Monitor: Methods

- During lockdown weekly, later be-weekly, now monthly invitation of respondents.
- March 30: start survey wave 1
- September 21: start survey wave 10
COVID-19 Social Monitor: Methods

- Sampling and calibration weights to allow for “representative” analysis of the Swiss population regarding age, gender, language region, canton, and education.
- 8,174 contacted individuals and N=2,026 responses in the first survey wave (response rate: 24.8%). 1500 to 1700 responses in the follow-up rounds.
- Use of established indicators and measures as far as possible.
- Funding so far: own funds from WIG and EBPI, supplemented by contributions of the Federal Office of Public Health and Health Promotion Switzerland
- Following results: mostly fixed-effects (panel) estimates using weighted data
Results

- Publication of new results within one day after finishing data collection: https://www.zhaw.ch/wig/covid-social-monitor
- Use of diverse communication channels: press releases, Social Media, etc.
Results: Health state of the general population

Less coughing in summer, but otherwise no changes in public health…
Results: Quality of life, stress, and psychological burden

On average, impaired quality of life and more stress during early lockdown. For few, increased psychological distress.
Results: Quality of life, stress, and psychological burden

Persons with pre-existing conditions (risk groups) show generally lower quality of life but are not differently affected by the pandemic.
Results: Quality of life, stress, and psychological burden

More impaired quality of life and more stress during lockdown for the younger compared to the elderly.

[Graphs showing the changes in quality of life, stress, and psychological distress over time for different age groups during re-opening of schools/shops in calendar week 2020.]
Results: Loneliness and activities

Heightened feelings of loneliness and less physical activity during lockdown.

[Graph showing changes in loneliness and physical activity over time during lockdown]
Results: Loneliness and activities

Especially the young from 18 to 29 often feel lonely during the lockdown.
Results: Loneliness and personal contacts elderly 65+

For the elderly, feelings of loneliness were – on average – less of a problem. Despite up to 20% that never met any friends, relatives, or neighbors during one week.
Results: Loneliness and activities

In general, persons with pre-existing conditions are more affected by loneliness and low levels of activity.
Results: Non-take-up of health services

Considerable non-take-up of health services during lockdown. Primary care (GPs) much less affected than specialized and hospital care. By end of August, a small degree of non-take-up triggered by the pandemic persists. Any long-term consequences for public health?
Results: Health services use

Non-take up mostly for planned appointments, but also some «emergency»-situations (as perceived by respondents). Non-take up mostly triggered by service providers during lockdown, after the lockdown mostly by patients.
Results: Individual protection (last 7 days)

High adherence to measures restricting social contacts during lockdown. As intended, gradual ease over time.
Results: Individual protection (last 7 days) – Adherence «always»/«mostly»

Not much signs of mounting «lack of discipline» in general. Face mask wearing increased lately.
Results: Individual protection (last 7 days) – Adherence «always»/«mostly»

All age groups showed similarly high adherence during lockdown. The younger show a faster ease of adherence – partly due to their higher involvement in the labor market/education and their higher dependence on public transport.

Adherence to protection measures (‘always’ & ‘mostly’)
Results: Individual protection (last 7 days) – Adherence «always»/«mostly»

Not much difference between language regions, except for an early widespread (and at the beginning voluntary) use of face masks in the Ticino.

Adherence to protection measures (‘always’ & ‘mostly’)

- Used disinfectant
- Kept distance to others
- Wore face mask
- Abstained from private visits
- Avoided public transport
- Coughed/sneezed into elbow/tissue
- Stayed at home except work/shop
- Cancelled meetings with elderly
- Regularly washed hands with soap

Calendar week 2020

% of respondents
Results: Productivity loss (by Bea Brunner)

Productivity loss of 46% during full lockdown (March 16 to April 19) which corresponds to CHF 6.2 billion/week.

Abbildung 1: Produktivitätsverluste durch Covid-19 für drei Zeiträume

Results: Productivity loss (by Bea Brunner)

Various lines of business are affected in a very different way.


Abbildung 1: Produktivitätsverluste durch Covid-19 für drei Zeiträume nach Branche
Results: Trust in Media, Government and Science

Despite increasing discussions and criticisms about the suitability of certain measures, trust in public broadcasting, government and science remains at a high level.
Results: Change in potentially critical behavior (for FOPH)

More web surfing, more gaming, but less online gambling compared to before the pandemic.

Change in potentially critical behavior during pandemic compared to before

- **Web surfing (N=1601)**
  - Considerably less: 1%
  - Considerably more: 10%

- **Gaming (N=920)**
  - Considerably less: 2%
  - Considerably more: 9%

- **Online Gambling (N=237)**
  - Considerably less: 1%
  - Considerably more: 7%

- **Use of tranquilizers and sedatives (N=177)**
  - Considerably less: 6%
  - Considerably more: 12%
Results: Proximity tracing app uptake (von Wyl et al., submitted)

Low app uptake, also among the young. Low rate of triggered notifications, as well as ignored app notifications.

Are COVID-19 proximity tracing apps working under real-world conditions? Indicator development and assessment of drivers for app (non-)use

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Abstract

Digital proximity tracing (DPT) apps have been released to mitigate SARS-CoV-2 transmission, but it remains unclear how their effectiveness should be monitored. The aim of this study was to formalize indicators for measuring the fulfillment of assumptions for appropriate proximity tracing app functioning.

Six indicators were developed to monitor the SwissCovid app functioning and effectiveness in the Swiss population. Using official statistics and survey data, we calculated indicator values and examined socio-demographic factors associated with the SwissCovid app utilization. Indicators show that 1 in 3 adults in Switzerland have downloaded the app. However, only 15% of new cases also triggered DPT-app notifications, and indicators also reveal ignored app notifications. In the full survey sample (n=2,098), higher monthly household income or being a non-smoker were associated with higher SwissCovid app uptake; older age or having a non-Swiss nationality with a lower uptake. In a subsample including more detailed information (n=701), high trust in health authorities was associated with higher SwissCovid app uptake.

The indicators help to monitor key drivers of DPT-apps effectiveness and hint to non-compliance issues. Streamlining procedures, removing technical hurdles, and communicating the usefulness of DPT-apps are crucial to promote uptake, compliance, and ultimately effectiveness of DPT-apps for pandemic mitigation.
Results: Individual risk perception

Different risk perception of COVID-19 infection by language region at beginning.

Risk perception for serious consequences of COVID-19 infection
calendar week 15

- need for medical treatment
- need for intensive care (ICU)
- death

Sprachregion
- German
  N=971
- French
  N=319
- Italian
  N=216
Results: Individual risk perception

Convergence and decreasing perceived risk, especially for risk groups.
Results: Individual risk perception

Different risk perception of COVID-19 infection by language region at beginning.

Risk perception for serious consequences of COVID-19 infection calendar week 29

- Need for medical treatment
  - No risk group
  - Risk group
  - Respondent her/himself

- Need for intensive care (ICU)
  - No risk group
  - Risk group
  - Respondent her/himself

- Death
  - No risk group
  - Risk group
  - Respondent her/himself

Sprachregion
- German N=953
- French N=305
- Italian N=206

in % of infected
Discussion

- Our population-based online panel
  - provides timely information about relevant social and public health aspects of the Swiss population during the COVID-19 pandemic
  - is able to follow survey participants over the course of the pandemic to monitor health and behavioral changes over time on an individual (not only aggregated) level
  - allows us to make conclusions about the impact of public health measures on various domains
  - our study findings can inform evidence-based decisions and policymaking
  - provides a data source for studies on a broad range of aspects of the COVID-19 pandemic and its impact on the population

- Limitations:
  - due to the data collection (online survey using an access-panel) there is likely some selectivity regarding, e.g., online-affinity and education, that must be addressed using statistical adjustment methods
  - possible under- or even non-representation of specific subpopulations (individuals with chronic diseases, lower education level, vulnerable groups, persons with serious health conditions)
  - possible under-estimation of adverse effects
  - data based on self-reported outcomes which are prone to misdiagnosis of health conditions
References

Artikel

Zeitschriftenbeiträge/Medienmitteilungen

Blogbeiträge
https://blog.zhaw.ch/gesundheitsoekonomie/2020/05/20/nicht-beanspruchung-medizinischer-behandlungen-wegen-corona-pandemie-weiterhin-substanziel-aber-abnehmend/
Geplante Studien/Publikationen

- Produktivitätsverluste durch die Pandemie
  - Simon Wieser, Bea Brunner
- Versorgungssituation/Nichtinanspruchnahme
  - Marc Höglinger et al.
- Präventionsverhalten
  - Klaus Eichler, Marc Höglinger
- Chronisch krank zu Zeiten von COVID-19: Einstellungen, Wohlbefinden und Präventionsmassnahmen
  - Viktor von Wyl (EBPI), Chloe Sieber, André Moser, Marc Höglinger
- Psychische Belastung der Allgemeinbevölkerung
  - Rebecca Brauchli, Oliver Hämmig, André Moser, Marc Höglinger

- Soziale Isolation, Einsamkeit mit Fokus ältere Bevölkerung
  - Flurina Meier
- Freiwilligenarbeit in COVID-19-Zeiten
  - Florian Liberatore et al.

- Und???
Lebensqualität

– Auswirkungen auf die Lebensqualität: Junge etwas stärker negativ beeinträchtigt
Einsamkeit und soziale Isolation

Anteil mit «sehr oft» Gefühlen von Einsamkeit
Covid-19 Social Monitor, Woche 5 des Lockdown

- Einsamkeit in der Gesamtbevölkerung etwa auf gängigem Niveau (1/3 hat mind. «Manchmal» Einsamkeitsgefühle)
- Soziale Isolation bei der Bevölkerung 65+:

Einsamkeit und soziale Isolation 65+
(Population: 65 Jahre oder älter)
Physische Aktivitäten, Erwerbsarbeit

Häufigkeit von Stress (1-5)

Häufigkeit/Woche Haus verlassen

Tage/Woche mit physischer Aktivität

Angst, Stelle zu verlieren (1-4)

Anteil im Homeoffice (mind. teilweise)

total (N=2026)

Woche des Lockdown
Physische Aktivitäten, Erwerbsarbeit

Häufigkeit von Stress (1-5)

Häufigkeit/Woche mit physischer Aktivität

Häufigkeit/Woche Haus verlassen

Angst, Stelle zu verlieren (1-4)

Anteil im Homeoffice (mind. teilweise)

Männlich (N=1042)
Weiblich (N=984)

Woche des Lockdown
Erwerbsarbeit

Anteil Angst, Arbeitsplatz zu verlieren (nur Erwerbstätige)

Anteil Kurzarbeit (nur Erwerbstätige)

Anteil im Homeoffice (mind. teilweise)

Arbeitslos durch COVID (Erwerbspopulation)

- Deutschschweiz (N=1292)
- Westschweiz (N=437)
- Tessin (N=297)

Woche des Lockdown