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COVID-19 social stratification in Switzerland

Summary of request/problem

Since the beginning of the pandemic, social scientists anticipated that the virus and the associated public health measures would exacerbate pre-existing social inequalities.

Executive summary.

The COVID-19 pandemic and the associated measures have socially differentiated consequences across society. Despite the virus possibly affecting everyone, individuals do not have similar resources to protect themselves from exposure and to cope with the multiple economic and social difficulties brought by the pandemic and by public health measures. This policy briefs aims at describing the differentiated impact of the COVID-19 pandemic and its associated measures across social groups in Switzerland.

Available evidence, based on differences along income, education, and work position, show that individuals placed at the lower end of the social spectrum have experienced a stronger economic impact and more job insecurity. They also have been more exposed to the virus, and more strongly impacted in their mental and self-reported health and access to healthcare. Switzerland is no exception and is experiencing the same social inequalities as observed in other countries.

Recommendation 1: The ability to take individual responsibility depends on social stratification and unequal resources which should be taken into account.

Some groups are better equipped to cope with difficulties than others and the importance of structural determinants of health must be kept in mind. Data on social stratification support nuancing the emphasis on individual responsibility as regards protection from the virus and its consequences.

Recommendation 2: The prohibition of direct and indirect discrimination obliges state actors to actively take compensatory measures aimed at equal opportunities.

Particular attention must be paid to those groups of people who were already considered vulnerable before the pandemic (e.g. children, people with disabilities, people living in poverty) and to those who have only become vulnerable as a result of the pandemic. In this context, it is important to take into account the risk of multiple discrimination (e.g. children with disabilities, women in precarious economic situations, persons with health problems and irregular residence in Switzerland).

Recommendation 3: Monitoring the pandemic consequences on different groups across society is important.

In analyses of the COVID-19 consequences in Switzerland, little attention is given to social stratification along education, income, and work position in analyses, especially regarding epidemiological and medical data. Data remains quasi-inexistent for groups with migrant origins, which have been shown to be an important factor of health and socioeconomic vulnerability in other countries.

Résumé

Le COVID-19 et les mesures liées à la pandémie ont des impacts différenciés à travers la société. Même si Le SARS-CoV-2 peut toucher tout le monde, les personnes ne disposent pas toutes et tous des mêmes ressources pour se protéger de l'exposition au virus, ni pour faire face aux difficultés économiques et sociales multiples engendrées par la pandémie et par les mesures de santé publique. Cette policy brief vise à décrire les impacts de la pandémie de COVID-19 et des mesures associées sur différents groupes sociaux en Suisse.

Les données disponibles, fondées sur les différences de revenu, d'éducation, et de situation professionnelle, montrent que les personnes situées en bas de l'échelle sociale ont subi un impact économique plus fort et une plus grande insécurité de l'emploi. Elles ont également été davantage exposées au virus et plus fortement touchées dans leur santé physique et mentale ainsi que dans leur accès aux soins. La Suisse connaît les mêmes inégalités sociales que celles observées dans d'autres pays et, ainsi, ne fait pas exception.

Recommandation 1: La capacité à prendre des responsabilités individuelles dépend de la stratification sociale et de l'inégalité des ressources, qui doivent être prises en compte.

Il faut garder à l'esprit l'importance des déterminants structurels de la santé et que certains groupes sont mieux équipés que d'autres pour faire face aux difficultés. Les données sur la stratification sociale soutiennent l'importance de nuancer l'accent mis sur la responsabilité individuelle en matière de protection contre le virus et contre ses conséquences.

Recommandation 2: L'interdiction de la discrimination directe et indirecte oblige les acteurs étatiques à activement prendre des mesures compensatoires pour assurer l'égalité des chances.

Une attention particulière doit être accordée aux groupes de personnes qui étaient considérés comme vulnérables déjà avant le COVID-19 (comme les enfants, les personnes en situation de handicap, les personnes vivant dans la pauvreté, etc.) et à ceux qui sont devenus vulnérables en raison de la pandémie. Dans ce contexte, il est important de prendre en compte le risque de discriminations multiples (par exemple: enfants avec handicap, femmes en situation économique précaire, personnes ayant des problèmes de santé et résidant de manière irrégulière en Suisse, etc.).

Recommandation 3: Il est important de surveiller les différents impacts de la pandémie sur les différents groupes de la société.

Dans l'analyse des conséquences de la COVID-19 en Suisse, peu d'attention est accordée à la stratification sociale en fonction de la formation, du revenu et de la situation professionnelle, notamment en ce qui concerne les données épidémiologiques et médicales. Les données restent quasi-inexistantes pour les personnes ayant des origines migratoires, alors qu'il s'agit, dans d'autres pays, de facteurs importants de vulnérabilité sanitaire et socio-économique.

Zusammenfassung.

COVID-19 und die damit verbundenen Massnahmen wirken sich quer durch die Gesellschaft unterschiedlich aus. SARS-CoV-2 kann potenziell jede und jeden treffen, aber nicht alle Menschen verfügen über dieselben Ressourcen, um sich vor einer Ansteckung zu schützen und um die vielfältigen wirtschaftlichen und sozialen Schwierigkeiten zu bewältigen, die durch die Pandemie und die Massnahmen im Bereich der öffentlichen Gesundheit verursacht werden. Der vorliegende Policy Brief beschreibt die Auswirkungen der COVID-19-Pandemie und der damit verbundenen Massnahmen auf verschiedene soziale Gruppen in der Schweiz.

Die verfügbaren Daten zeigen, dass Personen am unteren Ende der sozialen Skala – nach Massstäben, die sich auf Einkommen, Bildung und berufliche Stellung beziehen – stärkere wirtschaftlichen Auswirkungen und einen grösseren Mangel an beruflicher Sicherheit erlitten. Sie waren dem Virus auch stärker ausgesetzt und, nach eigenen Angaben, in ihrer körperlichen und seelischen Gesundheit sowie im Zugang zur Gesundheitsversorgung stärker beeinträchtigt. Die Schweiz verzeichnet dieselben sozialen Ungleichheiten wie andere Länder und stellt in dieser Hinsicht keine Ausnahme dar.

Empfehlung 1: Die soziale Schichtung und die ungleiche Verteilung von Ressourcen müssen berücksichtigt werden, da sie die Fähigkeit der Menschen zur Eigenverantwortung beeinflussen.

Die Bedeutung struktureller Gesundheitsdeterminanten und die Tatsache, dass einige Gruppen besser als andere dafür gerüstet sind, Schwierigkeiten zu bewältigen, sollten nicht vergessen werden. Die Daten zur sozialen Schichtung deuten darauf hin, dass die Betonung der individuellen Verantwortung für den Schutz vor dem Virus und seinen Folgen nuanciert werden muss.

Empfehlung 2: Das Verbot der direkten und indirekten Diskriminierung verpflichtet die staatlichen Akteure, sich aktiv um Ausgleichsmassnahmen zu bemühen, um die Chancengleichheit zu gewährleisten.

Besonderes Augenmerk muss auf jene Personengruppen gelegt werden, die bereits vor COVID-19 als gefährdet galten (z. B. Kinder, Menschen mit Behinderungen, in Armut lebende Menschen usw.), und auf jene, die erst durch die Pandemie vulnerabel wurden. In diesem Zusammenhang ist es wichtig, das Risiko der Mehrfachdiskriminierung zu berücksichtigen (z. B. Kinder mit Behinderungen, Frauen in prekären wirtschaftlichen Verhältnissen, Menschen mit Gesundheitsproblemen, die sich illegal in der Schweiz aufhalten, usw.).

Empfehlung 3: Es ist wichtig, die unterschiedlichen Auswirkungen der Pandemie auf verschiedene gesellschaftliche Gruppen zu überwachen.

Die soziale Schichtung nach Bildung, Einkommen und beruflicher Stellung wird in den Analysen der Auswirkungen von COVID-19 kaum berücksichtigt, insbesondere was die epidemiologischen und medizinischen Daten betrifft. Für Personen mit Migrationserfahrung oder -hintergrund, gibt es nach wie vor kaum Daten, obwohl sich in anderen Ländern gerade dies als wichtiger Faktor für die gesundheitliche und sozioökonomische Verwundbarkeit erwiesen hat.

Riepilogo esecutivo.

La pandemia da COVID-19 e le misure correlate hanno conseguenze socialmente differenziate nell'intera società. Sebbene il virus possa colpire tutti indistintamente, le persone non hanno risorse simili per proteggersi dall'esposizione e per far fronte alle molteplici difficoltà economiche e sociali che la pandemia e le misure in materia di salute pubblica comportano. Questo

documento di sintesi ha lo scopo di descrivere l'impatto differenziato della pandemia da COVID-19 e delle misure correlate in tutti i gruppi sociali in Svizzera.

Le prove a disposizione, basate sulle differenze relativamente a reddito, istruzione e posizione lavorativa, mostrano che le persone al gradino più basso della scala sociale hanno subito un impatto economico più significativo e sperimentato una situazione di maggiore insicurezza sul lavoro. Sono state anche più esposte al virus e più fortemente colpite a livello di salute mentale e auto-percezione della salute nonché per quanto riguarda l'accesso all'assistenza sanitaria. La Svizzera non fa eccezione e sta vivendo le stesse disuguaglianze sociali osservate in altri Paesi.

Consiglio 1: la capacità di assumersi la responsabilità individuale varia in funzione della stratificazione sociale e della disuguaglianza di risorse che dovrebbero essere prese in considerazione.

Alcuni gruppi possono contare su strumenti migliori per affrontare le difficoltà e occorre tenere presente l'importanza delle condizioni strutturali determinanti per la salute. I dati sulla stratificazione sociale sostengono una ridefinizione dell'importanza della responsabilità individuale per quanto riguarda la protezione dal virus e le relative conseguenze.

Consiglio 2: il divieto di discriminazione diretta e indiretta obbliga gli attori statali ad adottare attivamente misure compensative mirate alle pari opportunità.

Occorre prestare particolare attenzione a quei gruppi di persone già considerati vulnerabili prima della pandemia (ad es. bambini, persone con disabilità, persone che vivono in condizioni di povertà) e a coloro che sono diventati vulnerabili solo in seguito alla pandemia. In questo contesto, è importante considerare il rischio di discriminazione multipla (ad es. bambini con disabilità, donne in situazioni economiche precarie, persone con problemi di salute e residenza irregolare in Svizzera).

Consiglio 3: è importante monitorare le conseguenze della pandemia su diversi gruppi nell'intera società.

Nelle analisi delle conseguenze del COVID-19 in Svizzera, si presta poca attenzione alla stratificazione sociale relativamente a istruzione, reddito e posizione lavorativa, soprattutto per quanto riguarda i dati epidemiologici e medici. I dati continuano a essere pressoché inesistenti per i gruppi di migranti, la cui condizione di migrante ha dimostrato di essere un importante fattore di vulnerabilità a livello sanitario e socioeconomico in altri Paesi.

Main text

Introduction

Early on in the pandemic and based on available evidence for past epidemics, researchers anticipated that the virus would have a differentiated impact across society, exacerbating pre-existing inequalities (Bambra et al. 2020, Marmot & Allen 2020). This could be expected as a result of the social distribution of chronic diseases and of the social determinants of health in general. If all individuals are potentially exposed to the virus, they have unequal resources to protect themselves and to cope with the multiple consequences of the pandemic.

Evidence of the impact of the COVID-19 pandemic on social stratification is accumulating across a number of countries (Grasso et al, 2021, Clouston et al., 2021), with an emphasis on a second socioeconomic pandemic developing next to the COVID-19 pandemic (Fiske et al. 2021). This

policy brief aims at documenting the differentiated impact of the COVID-19 pandemic and its associated measures across social groups in Switzerland. Common welfare is one of the aims of the Swiss Confederation and a binding objective of the Confederation, the Cantons and the Communes (Art. 2 para 2 Federal Constitution). The “strength of a people” does not depend on the situation of its privileged segments but “is measured by the well-being of its weakest members” (preamble of the Federal Constitution). In times of crisis, this aim - and the obligation to particularly consider the wellbeing of the society’s weakest members - is thus particularly relevant.

This brief is focused on social stratification as measured by education, income, and work position. Available results for Switzerland are not systematically stratified along these factors. We also use data assessing migrant and economically deprived groups, when available. Other social stratification factors such as age, regional differences, and gender are more often used in analyses, but not discussed here. The combined and multiplicative effects of these factors, referred to as intersectionality in social stratification research, should however be kept in mind. The gender impact of the COVID-19 pandemic is specifically addressed in a separate policy brief.

In this brief, we use available empirical data, favoring studies based on representative samples of the population living in Switzerland and those offering a dynamic view of social stratification with data collected over several waves and/or longitudinal data allowing comparisons with indicators as reported in the period before the pandemic (Swiss Household Panel data¹ SHP (Tillmann et al. 2021), COVID-19 Social Monitor², MOSAICH³). In currently available publications, most results are descriptive, and indications whether differences across groups are statistically significant are usually absent.

First the role of measures taken to control and/or mitigate the pandemic on socioeconomic and work conditions is presented. Available data on family, social conditions and COVID-19 knowledge are then described. Finally, social stratification of COVID-19 and other health-related indicators is reported.

Socio-economic situation and work conditions

Among the respondents of the Swiss Household Panel (SHP), deterioration of the financial situation was observed across all education levels, while an improvement of the financial situation was also reported by 15% of the total sample, more often among the most educated (Refle et al. 2021). Overall, low-income individuals were more seriously affected (Tillmann et al. 2021). Use of savings was more frequent among the unemployed and self-employed (Martínez et al. 2021, Refle et al. 2021). In MOSAICH data, independent workers reported being very preoccupied by the impact of the COVID-19 pandemic on their financial situation (Ehrler et al. 2021b).

According to SOTOMO data (six waves of on-line study with self-recruitment), income loss due to COVID-19 measures was socially stratified: it averaged 20% for respondents in the lowest income category (less than 4'000 CHF/month) and 8% for those in the highest income category (over 16'000 CHF/month) (Kopp et al. 2021). Across all income categories, those who lost their job during the COVID-19 crisis were most hit by income loss.

Spending decreased overall but in a higher proportion for those with higher incomes. This is explained by the fact that lower income groups dedicate more of their spending to primary needs. For those with higher income, the capacity to spend was reduced due to shopping, restaurant, and travel restrictions. Consequently those with higher income also reported a higher capacity to save money during the crisis. A social distribution of new debts due to COVID-19 measures is also

¹ <https://forscenter.ch/projects/swiss-household-panel/>

² <https://www.zhaw.ch/en/research/research-database/project-detailview/projektid/3749/>

³ <https://forscenter.ch/projects/mosaich/>

observed with 11% of those in the lowest income category reporting having borrowed money (SOTOMO data, Martínez et al. 2021).

Several studies (SHP, SOTOMO, COVID-19 Social Monitor) show that the capacity to work from home is socially distributed (Martínez et al. 2021, COVID-19 SM, Marti & Ferro-Luzzi 2021). Only 26% of those with primary or lower education indicated that they work partially or entirely from home versus 71% of those with a university degree (Refle et al. 2021). Those with lower education report more frequently being in short-time work (23% versus 13% amongst university educated) (Refle et al. 2021). MOSAICH data indicate that people working in the public sector reported being more satisfied with their work and financial situation than those in the private sector (Erhler et al. 2021b). The fear of losing one's job is socially distributed, being more frequent among those with lower education and lower income (COVID-19 SM, SHP Refle et al. 2021, Tillmann et al. 2021).

Among undocumented or newly regularized economic migrants in Geneva, working in domestic work, restaurant and construction sectors, three out of four among those who were employed in spring 2020 had lost part or all of their working hours. Only one in five considered having sufficient financial means to cover basic needs for the next 3 months or more (Burton-Jeangros et al. 2020). A study conducted with persons attending food distribution centers in Geneva shows similar financial precarity, with one in four having lost her or his job (Bonvin et al. 2020). In both studies, difficult material conditions were associated with food insecurity (less food consumption and lower quality of food).

Social and family relations

Next to gender inequalities in work-life balance (cf policy brief on gender effects of COVID-19⁴), a few results along individuals' social position indicate contrasting effects of COVID-19 measures. On the one hand, more difficulty in work-family conciliation was reported by higher educated SHP respondents, feeling more often overwhelmed by having their children at home (Refle et al. 2021). This is likely to reflect the higher propensity of these individuals to be working from home during the lockdown.

On the other hand, different findings suggest that the COVID-19 measures had a more severe impact on those with lower social positions and less resources. Improvements in relations with neighbors were reported by higher educated participants (Refle et al. 2021). In MOSAICH data, those with higher income reported having received more emotional and practical support than those in the lower income categories, the former were also more happy with the situation in their relationship with their partner and the organisation of childcare (Monsch and Steimetz 2021). Those with lower income more often reported feeling lonely (COVID-19 SM).

COVID 19 knowledge

International studies show that lower levels of education or income are correlated with lower levels of knowledge about Covid-19 (Alobuia et al. 2020, Labban et al 2020,). Alobuia et al (2020) found that racial minorities in the US were likely to have lower levels of knowledge of COVID-19 than white survey respondents; those with lower education and/or income levels were also likely to report lower levels of knowledge. However, many of these studies were conducted in the early months of the pandemic, and it is not clear if these differences narrowed over time between socioeconomic groups, as knowledge became more widespread.

The Science Barometer Switzerland⁵ – COVID19 edition indicates some variation by education level (compulsory, secondary, tertiary) on some questions, but without a clear or obvious pattern -- that is, it is not clear that more highly-educated groups were more knowledgeable about COVID-19, nor that they obtained their knowledge from different sources. Rather, most respondents seemed to obtain their information from television and radio, especially RTS/SRF.

⁴ <https://sciencetaskforce.ch/en/policy-brief/gender-aspects-of-covid-19-and-pandemic-response/>

⁵ <https://wissenschaftsbarmeter.ch/>

More highly educated respondents obtained information more frequently from newspapers and magazines, while less educated individuals obtained information more from conversations with friends, and from social media or online (i.e. Facebook, Twitter, Wikipedia, YouTube). Respondents were also asked to rate the degree to which they agreed or disagreed with a set of six conspiracy theories. There was a clear gradient in the responses, with a greater proportion of those having a lower level of education (compulsory only) expressing agreement with conspiracy theories than those with higher levels of education.

Regarding interest in science, no major difference across education levels could be observed. Higher educated people rated the importance of science in society higher. Lower educated respondents reported less trust in politicians and authorities. Overall there were no educational differences in high levels of confidence in scientists and medical practitioners, nor in support for science-based measures in the pandemic (Science Barometer Switzerland⁶).

COVID-19 morbidity and mortality

Studies conducted abroad have shown a social stratification of the risk of becoming infected with SARS-CoV2 and dying of COVID-19, both because of a greater risk of contracting the disease (See for example Ossimetha et al 2021) and because of higher mortality rates in disadvantaged groups. This social stratification has been described in several countries, along both economic and ethnic lines (Quan 2021, Ward 2021, Liao 2021). Since socio-economic disadvantage is known to be associated with risk factors for severe COVID-19 (Khalatbari-Soltani 2020, Wilkinson & Marmot 2004), these associations are not unexpected. It has also been shown that societies with higher economic inequalities and less social capital (Frenk et al. 2020) have experienced more COVID-19 deaths.

Swiss data from the COVID-norms study shows that even without differences in reported compliance with protective measures, some people are more at risk than others of contracting SARS-CoV-2⁷. The risk of contracting COVID-19 also varies with occupational activity and clusters of SARS-CoV-2 infections persist longer in socioeconomically disadvantaged neighborhoods (De Rieder 2021⁸). This could be due to varying feasibility of home-office, different likelihoods of unprotected contacts at work, and more crowded conditions at home for individuals with low-income jobs. This is in line with data from the US showing less social distancing in counties below the poverty line (Garnier 2021). In Switzerland also, people with a lower level of education and lower income, among others, are less likely to have the opportunity to protect themselves by working from home (COVID-19 Social Monitor⁹. For this reason, consistent implementation of protective measures at workplaces is of particular importance.

A recent study conducted in Switzerland on almost 3 million eligible SARS-CoV2 test results showed that individuals lower on the Swiss neighborhood index of socioeconomic position (Swiss-SEP) were less likely to be tested, but more likely to test positive, require admission into hospital or intensive care, or die, than individuals on the higher end of the index (Riou et al. 2021). Those in the highest Swiss-SEP category were 34% less likely to die than those in the lowest category, although the difference disappeared above the age of 80.

A comparison of death reports until May 2021 by nationality revealed that among people living in Switzerland, those having a Swiss passport were less likely to die than those with no such passport (Plümecke et al. 2022).

⁶ <https://wissenschaftsbarometer.ch/>

⁷ https://covid-norms.ch/wp-content/uploads/2021/03/Covid-Norms_Fachgesprach_20210112_Friemel-Geber_webseite.pdf

⁸ <https://pubmed.ncbi.nlm.nih.gov/33614571/>

⁹ <https://covid19.ctu.unibe.ch/>

Sotomo data analyzed by the KOF shows that groups with higher incomes were in 2021 more willing to be vaccinated (Martínez et al 2021, ¹⁰). Although no systematic data is available on barriers to access vaccination, clinical experiences from health care professionals working with undocumented migrants also suggests recurrent obstacles. Despite being explicitly included in the vaccination campaign, and despite health insurance not being required to access COVID-19 vaccination or to sign up for an appointment, some were turned away by vaccination centers for lack of required ID and the like.

Health impact beyond COVID: mental well-being, self-reported health, and healthcare use SHP data, allowing comparisons of the same individuals before and after COVID-19 measures in Spring 2020, show no impact of COVID-19 measures on life satisfaction, but a reduction in stress levels in the general population. Reduction of stress was more pronounced among individuals having more socioeconomic resources (as measured by education and income). Life satisfaction diminished more among the unemployed while overall employment proved to be protective for mental health (Refle et al., 2021a, Kuhn et al. 2021). Data from the COVID-19 Social Monitor show that those with lower education report a lower and more fluctuant quality of life as well as more distress (Höglinger et al. 2021). It was observed that individuals in more vulnerable groups – defined by unemployment, lower education, poor health – more often experienced posttraumatic growth (Refle et al. 2021). Findings of the Basel Corona Immunitas study including over 13'000 participants show poorer mental and physical health, as well as a lower well-being among low-income individuals (Keidel et al. 2021).

As in pre- COVID-19 times, self-reported health follows a social gradient with those having more resources reporting being in better health (Martínez et al. 2021). The COVID-19 Social Monitor data show that over time the gap between social groups increased, and in particular the self-reported health of those with the lowest income decreased since fall 2020 ¹¹. Non-use of health services declined between spring 2020 and spring 2021; it was greater in lower income groups in the early weeks of the pandemic, a social gradient that has disappeared over time (COVID-19 SM). The on-going study “Access to healthcare, recovery capacity and cumulative disadvantage of socially vulnerable people tested for the SARS-CoV-2: a registry-based prospective regional study (SELFISH)” funded by the LIVES¹² center will provide further findings.

Conclusion and recommendations

The potential for exacerbating socioeconomic and health inequalities had been rapidly emphasized by specialists and accumulating evidence supports the socially differentiated impact of the COVID-19 pandemic and associated public health measures on the living conditions of the population. Analyses conducted elsewhere (Grasso et al. 2021, Holst et al. 2021, Witteveen 2020), show that those in lower social positions experienced more economic hardship due to lockdown measures. Ethnic minorities were also hit more hard, and more likely to lose their job during the lockdown period (Hu 2020).

From the early days of the pandemic, Swiss social scientists have analyzed the societal consequences of the pandemic (Gamba et al., 2020) and empirical findings are progressively published, in particular on vulnerable populations (Rosenstein & Mimouni, in press). Available evidence emphasize a differentiated impact of the COVID-19 virus and associated measures, confirming the forecasts of the Swiss conference of Social Aid (<https://skos.ch/themen/sozialhilfe-und-corona/monitoring-fallzahlen/>). Those at the lower end of the social spectrum have

¹⁰ <https://kof.ethz.ch/news-und-veranstaltungen/medien/medienmitteilungen/2021/02/corona-krise-verschaerft-ungleichheit-in-der-schweiz.html>

¹¹ <https://covid19.ctu.unibe.ch/>

¹² <https://www.centre-lives.ch/en>

experienced a stronger economic impact and more job insecurity. The capacity for teleworking is socially distributed and essential workers, often in lower socioeconomic positions, are less likely to be able to work from home. On top of economic and social difficulties, those in lower social positions have been more exposed to the virus, and were more strongly impacted in their mental and physical health and access to healthcare. Local data on some particularly vulnerable segments of society (undocumented workers, homeless people, etc.) suggest that they are strongly hit by the pandemic and the associated measures, without having access or being eligible for compensation schemes. Available results do not indicate clear educational differences as regards COVID-19 knowledge and confidence in experts and science-based measures.

Despite the virus possibly affecting everyone, individuals do not have similar resources to protect themselves from exposure (e.g. teleworking) and to cope with the multiple economic and social difficulties brought by the public health measures (e.g., income, savings, social support, etc.). These findings confirm the importance of the social determinants of health and the extent of structural inequalities (Bambra et al. 2020, Clouston et al. 2021), including in Switzerland. While these inequalities are often ignored, with analyses focusing on cultural differences along linguistic regions, the COVID-19 pandemic emphasizes their importance.

Common welfare and equality of chances are fundamental values of the Federal constitution which are binding on all state actors (art. 2 Federal constitution). The effects of the pandemic and pandemic replies on social stratification must hence be carefully observed and mitigated wherever possible. As available research suggests that COVID related information and access to testing, quarantining and vaccinating is unequally distributed amongst different segments of society, efforts to reach vulnerable groups should be increased.

Recommendation 1: The dependence of individual responsibility on social stratification and unequal resources should be taken into account

Social stratification evidence calls for nuancing the emphasis on individual responsibility as regards protection from the virus and its consequences. Clearly some groups are better equipped to cope with difficulties than others and the importance of structural determinants of health must be emphasized. The constitution emphasizes the duty of all individuals to take care of themselves: all individuals must take responsibility for themselves and contribute to achieving the aims of the state and society (Art. 6 Federal Constitution). State actions in the field of social security hence only aim at complementing, not replacing, “personal responsibility and private initiative” (Art. 41 Federal Constitution). The duty to take equalizing measures does not question this fundamental duty but considers that a) some individuals - due to their social situation or other sensitive characteristics (such as gender, age) - have more private and public responsibilities to shoulder than others and b) some individuals - for the same reasons - find it more difficult to take responsibility for themselves and to contribute to achieving common goals (e.g. because it is not possible for them to work from home, to avoid rush hours in public transports, etc.).

Recommendation 2: The prohibition of direct and indirect discrimination obliges state actors to actively take compensatory measures aimed at equal opportunities

From a legal perspective, if state measures aimed at everyone equally have a particularly negative effect on persons with certain sensitive characteristics (age, gender, origin, social status), this constitutes indirect discrimination. The constitution (and international law) prohibit discrimination on grounds of “social position” (Art. 8 para 2 Federal Constitution). The fundamental right of non-discrimination hence forbids federal and cantonal parliaments, governments, and administrations to treat persons having different social positions equally if such equal treatment disproportionately affects persons belonging to a socially or economically

disadvantaged group (*prohibition of indirect discrimination*). For this reason, it is essential to monitor the effects of state measures (as well as the removal of these measures) and to compensate for resulting disadvantages. The prohibition of discrimination obliges state actors to actively take compensatory measures aimed at equal opportunities. Particular attention must be paid to those groups of people who were already considered vulnerable before the pandemic (e.g. children, people with disabilities, people living in poverty) and to those who have only become vulnerable as a result of the pandemic. In this context, it is important to take into account the risk of multiple discrimination (e.g. children with disabilities, women in precarious economic situations, persons with health problems and irregular residence in Switzerland).

To clarify the constitutionality of the situation and to design corrective measures, there is thus obligation:

- to collect and analyze relevant data on the effects of the pandemic and pandemic responses on “social position”, along individuals’ social position and origin;
- to distinguish situations in which there are qualified justifications for unequal effects (e.g. the need for essential work to be done) from situations in which such qualified justifications are missing (e.g. difficult access to health services, vaccines, etc.);
- to identify state measures qualifying as indirect discrimination and to replace them by non-discriminatory measures;
- to plan, coordinate, and implement action plans to compensate for the socially stratifying effects of the pandemic and the pandemic responses and to decrease their impact on the equality of chances.

Recommendation 3: Monitoring the pandemic consequences on different groups across society is important

Our synthesis reveals the too limited attention given to social stratification along education, income, and work position in analyses of the COVID-19 consequences in Switzerland, especially regarding epidemiological and medical data (Khalatbari-Soltani et al. 2020). In addition, data remain quasi-inexistent as regards to groups with migrant origins, while it has been shown as an important factor of health and socioeconomic vulnerability in other countries.

As state authorities may not discriminate based on origin, race, gender, age, language, social position, convictions, or disability (Art. 8 Federal constitution), segregated data for groups presenting such characteristics are required. Such segregated data are also necessary to plan and implement positive equalizing measures, mandated by the constitution.

Considering the long-term consequences of the pandemic, it is particularly important to monitor how social stratification develops over time, as individuals of different generations age. Its expected impact on younger cohorts particularly calls for paying attention to social stratification among children, adolescents, and young adults. The multiplicative effects of social position, migrant origin, and gender will have to be monitored closely.

References

Alobuia, W. M., Dalva-Baird, N. P., Forrester, J. D., Bendavid, E., Bhattacharya, J., & Kebebew, E. (2020). Racial disparities in knowledge, attitudes and practices related to COVID-19 in the USA. *Journal of public health*, 42(3), 470-478.

Bambra, C., Riordan, R., Ford, J., & Matthews, F. (2020). The COVID-19 pandemic and health inequalities. *Journal of Epidemiology and Community Health*, 74(11), 964.

<https://doi.org/10.1136/jech-2020-214401>

Bhala, N., Curry, G., Martineau, A. R., Agyemang, C., & Bhopal, R. (2020). Sharpening the global focus on ethnicity and race in the time of COVID-19. *The Lancet*, 395(10238), 1673–1676.

[https://doi.org/10.1016/S0140-6736\(20\)31102-8](https://doi.org/10.1016/S0140-6736(20)31102-8)

Bonvin, J.-M., Lovey, M., Rosenstein, E. & Kempeneers, P. (2020). [La population en grande précarité en période de COVID-19 à Genève : conditions de vie et stratégies de résilience](#). Rapport final de l'étude sollicitée par la fondation Colis du Coeur. Genève : Université de Genève.

Byanaku, A., & Ibrahim, M. (2020). Knowledge, attitudes, and practices (KAP) towards COVID-19: A quick online cross-sectional survey among Tanzanian residents. *MedRxiv*.

Burton-Jeangros, C., Duvoisin, A., Lachat, S., Consoli, L., Fakhoury, J., & Jackson, Y. (2020). The Impact of the Covid-19 Pandemic and the Lockdown on the Health and Living Conditions of Undocumented Migrants and Migrants Undergoing Legal Status Regularization. *Frontiers in Public Health*, 8, 940. <https://doi.org/10.3389/fpubh.2020.596887>

Clouston, S. A. P., Natale, G., & Link, B. G. (2021). Socioeconomic inequalities in the spread of coronavirus-19 in the United States : A examination of the emergence of social inequalities. *Social Science & Medicine*, 268, 113554. <https://doi.org/10.1016/j.socscimed.2020.113554>

Ehrler F, Monsch G-A, Steinmetz S (2021a) Bien-être et inquiétudes pendant le confinement. Enquête FORS Covid-19, fiche d'information N°1 (https://forscenter.ch/wp-content/uploads/2020/09/factsheet_bien-etre.pdf)

Ehrler F, Monsch G-A, Steinmetz S (2021c) Activité professionnelle en temps de confinement et perspectives d'avenir. Enquête FORS Covid-19, fiche d'information N°3 (https://forscenter.ch/wp-content/uploads/2020/09/factsheet_travail.pdf)

Frank J. Elgar, Anna Stefaniak, Michael J.A. Wohl. 2020. The trouble with trust: Time-series analysis of social capital, income inequality, and COVID-19 deaths in 84 countries. *Social Science & Medicine*. Volume 263, 2020, 113365, ISSN 0277-9536. <https://doi.org/10.1016/j.socscimed.2020.113365>

Fiske, A., Galasso, I., Eichinger, J., McLennan, S., Radhuber, I., Zimmermann, B., & Prainsack, B. (2022). The second pandemic : Examining structural inequality through reverberations of COVID-19 in Europe. *Social Science & Medicine*, 292, 114634. <https://doi.org/10.1016/j.socscimed.2021.114634>

Gamba, F., Nardone, M., Ricciardi, T., & Cattacin, S. (2020). COVID-19, le regard des sciences sociales. Zürich, Seismo.

Garnier, R., Benetka, J. R., Kraemer, J., & Bansal, S. (2021). Socioeconomic Disparities in Social Distancing During the COVID-19 Pandemic in the United States: Observational Study. *Journal of medical Internet research*, 23(1), e24591. <https://doi.org/10.2196/24591>

Grasso, M., Klicperová-Baker, M., Koos, S., Kosyakova, Y., Petrillo, A., & Vlase, I. (2021). The impact of the coronavirus crisis on European societies. What have we learnt and where do we go from here? – Introduction to the COVID volume. *European Societies*, 23(sup1), S2-S32. <https://doi.org/10.1080/14616696.2020.1869283>

Höglinger M, Carlander M, Wieser S, Hämmig O, Heiniger S, Puhani M, von Wyl V, Moser A (2021) The COVID-19 Social Monitor – Monitoring the Social and Public Health Impact of the Pandemic,

presentation at the FORS COVID-symposium (<https://forscenter.ch/wp-content/uploads/2021/03/hoeglinger-covid-19-social-monitor-fors-march2021.pdf>)

Holst, H., Fessler, A., & Niehoff, S. (2021). Covid-19, social class and work experience in Germany: Inequalities in work-related health and economic risks. *European Societies*, 23(sup1), S495–S512. <https://doi.org/10.1080/14616696.2020.1828979>

Hu, Y. (2020). Intersecting ethnic and native–migrant inequalities in the economic impact of the COVID-19 pandemic in the UK. *Research in Social Stratification and Mobility*, 68, 100528. <https://doi.org/10.1016/j.rssm.2020.100528>

Keidel, D. (2021). Corona Immunitas. Wissenschaftlicher Schlussbericht. https://www.swisstph.ch/fileadmin/user_upload/CoVCoBasel_Schlussbericht_20211028.pdf

Khalatbari-Soltani, S., Cumming, R. G., Delpierre, C., & Kelly-Irving, M. (2020). Importance of collecting data on socioeconomic determinants from the early stage of the COVID-19 outbreak onwards. *Journal of Epidemiology and Community Health*, jech-2020-214297. <https://doi.org/10.1136/jech-2020-214297>

Labban, L., Thallaj, N., & Labban, A. (2020). Assessing the level of awareness and knowledge of COVID 19 pandemic among syrians. *Arch Med*, 12(2), 8.

Liao, T. F., & De Maio, F. (2021). Association of Social and Economic Inequality With Coronavirus Disease 2019 Incidence and Mortality Across US Counties. *JAMA Network Open*, 4(1), e2034578–e2034578. <https://doi.org/10.1001/jamanetworkopen.2020.34578>

Marti, J., & Ferro-Luzzi, G. (2021). Covid-19 : une double peine pour les ménages les plus vulnérables en Suisse. *Revue médicale suisse*, 17, 248-253

Martínez, I. Z., Kopp D., Lalive R., Pichler S., Siegenthaler M. (2021) Corona und Ungleichheit in der Schweiz - Eine erste Analyse der Verteilungswirkungen der Covid-19-Pandemie, KOF Studies, no. 162. <https://doi.org/10.3929/ethz-b-000512241> Kuhn, U., Klaas, H. S., Antal, E.,

Dasoki, N., Lebert, F., Lipps, O., Monsch, G.-A., Refle, J.-E., Ryser, V.-A., Tillmann, R., & Voorpostel, M. (2021). Who is most affected by the Corona crisis? An analysis of changes in stress and well-being in Switzerland. *European Societies*, 23(sup1), S942–S956. <https://doi.org/10.1080/14616696.2020.1839671>

Marmot, M., & Allen, J. (2020). COVID-19: Exposing and amplifying inequalities. *Journal of Epidemiology and Community Health*, jech-2020-214720. <https://doi.org/10.1136/jech-2020-214720>

Monsch G-A, Steimetz S (2021) Conciliation de la vie de famille et du travail pendant le confinement. Enquête FORS Covid-19, fiche d'information N°4 (https://forscenter.ch/wp-content/uploads/2020/09/factsheet_famille.pdf)

Ossimetha, A., Ossimetha, A., Kosar, C. M., & Rahman, M. (2021). Socioeconomic Disparities in Community Mobility Reduction and COVID-19 Growth. *Mayo Clinic proceedings*, 96(1), 78–85. <https://doi.org/10.1016/j.mayocp.2020.10.019>

Plümecke, T., Mikosch, H., Mohrenberg, S., Supik, L., Razum, O., Bartram, I., Ellebrecht, N., Schnieder, L., Schönberger, H., Schulze-Marmeling, C., zur Nieden, A., & Gutzeit, A. (2022).

Unterschiedliche Sterblichkeit von Menschen mit und ohne Schweizer Pass während der COVID-19-Pandemie [Application/pdf]. 1057479 bytes. <https://doi.org/10.4119/UNIBI/2961127>

Quan, D., Luna Wong, L., Shallal, A., Madan, R., Hamdan, A., Ahdi, H., Daneshvar, A., Mahajan, M., Nasereldin, M., Van Harn, M., Opara, I. N., & Zervos, M. (2021). Impact of Race and Socioeconomic Status on Outcomes in Patients Hospitalized with COVID-19. *Journal of general internal medicine*, 36(5), 1302–1309. <https://doi.org/10.1007/s11606-020-06527-1>

Refle, J.-E., Voorpostel, M., Lebert, F., Kuhn, U., Klaas, H.S., Ryser, V.-A., Dasoki, N., Mosch, G.-A., Antal, E., & Tillmann, R. (2020). First results of the Swiss Household Panel – Covid-19 Study. FORS Working Paper Series, paper 2020-1. Lausanne: FORS. DOI: 10.24440/FWP-2020-00001

Riou, J., Panczak, R., Althaus, C. L., Junker, C., Perisa, D., Schneider, K., ... Egger, M. (2021, April 26). Socioeconomic position and the cascade from SARS-CoV-2 testing to COVID-19 mortality: Analysis of nationwide surveillance data. <https://doi.org/10.17605/OSF.IO/EP4X9>

Rosenstein, E., & Mimouni, S. (in press). COVID-19. Les politiques sociales à l'épreuve de la pandémie, Zürich: Seismo.

Tillmann, R., Kuhn, U., Kuhr, J., Thiévent, R., & Tabin, J.-P. (2021). Effets de la pandémie de coronavirus et du semi-confinement sur les conditions de vie : Une analyse de l'enquête « COVID-19 » du Panel suisse de ménages selon les catégories de revenu. Rapport pour l'OFAS. HETSL, FORS (https://www.contre-la-pauvrete.ch/fileadmin/kundendaten/Publikation_COVID__SHP_DEF.pdf).

Ward, H., Atchison, C., Whitaker, M., Ainslie, K. E. C., Elliott, J., Okell, L., Redd, R., Ashby, D., Donnelly, C. A., Barclay, W., Darzi, A., Cooke, G., Riley, S., & Elliott, P. (2021). SARS-CoV-2 antibody prevalence in England following the first peak of the pandemic. *Nature Communications*, 12(1), 905. <https://doi.org/10.1038/s41467-021-21237-w>

Wilkinson R G & Marmot M (2004, 2d edition) *Solid Facts*. Geneva: WHO.