



Irreführung der Welt und der Schweizerischen Gesellschaft durch manipulative QALY-Studien zur Pandemiesituation durch Professoren von Basler Universitäten

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Zusammenfassung:

Zwei Professoren der Basler Universität aus den Gebieten Public Health und Gesundheitsökonomie legen zwei QALY-Studien zur Nützlichkeit des Lockdowns während der Pandemie vor, befragen aber Personen betreffend Verlust an Lebensqualität für die Situation ausserhalb einer Pandemie. Mit diesem Studiendesign gelangen die Autoren zu falschen Resultaten. Der Gewinn an Lebensqualität durch die solidarische Gesellschaft zum Schutze vulnerabler Personen wird ausgeblendet. Damit wird im Ergebnis eine Destabilisierung der Solidarität der Gesellschaft befördert. Beide Studien müssen deshalb zurückgezogen werden.

Einleitung:

In der Schweiz werden QALYs dazu verwendet, die öffentliche Meinung über den Nutzwert von medizinischen Massnahmen zu beeinflussen. QALY sind tatsächlich nicht in der Lage, eine Lösung zu Fragen der Kosteneffektivität zu bilden(1). Die QALY-Methode wird allerdings nicht hinterfragt, obwohl die Resultate, welche aus den gesundheitsökonomischen Modellen abgeleitet werden, alles andere als plausibel sind(2). Trotz dieser schwerwiegenden Mängel findet in der Schweiz kein kritischer Diskurs zu QALYs statt, und die QALY Methode wird mit staatlichen Mitteln gefördert(3). Tatsache ist, dass in zahlreichen Ländern wie etwa in Deutschland QALYs nicht verwendet werden, weil sie ethisch problematisch sind. Eine ausführliche Zusammenfassung der ethischen Probleme rund um QALYs wurde bereits vom deutschen Ethikrat im Jahr 2011 erstellt (4). Auch hat der Deutsche Ethikrat aufgrund seiner Analysen der QALYs festgestellt, dass QALYs die utilitaristische Ethik abbilden. Trotz massiver Mängel dieser gesundheitsökonomischen Methode beträgt die Zahl der QALY-Publikationen weltweit mittlerweile fast 1'000 pro Jahr (<https://cevr.tuftsmedicalcenter.org/databases/cea-registry>) . Hierfür gibt es verschiedene Gründe. Erstens können die verwendeten Modelle billig erstellt werden, da sie meistens Fantasieprodukte sind oder auf ungenügenden Forschungsergebnissen basieren. Insbesondere die Publikums-Befragungen sind dabei besonders anfällig auf Fälschungen und Irreführung. Zweitens lassen sich die Annahmen in den Modellen beliebig manipulieren, womit dann eben auch beliebige Resultate erzeugt werden können, welche je nach Auftraggeber manipuliert werden. Drittens birgt die Manipulationsanfälligkeit von QALY-Studien die Gefahr, dass diese dazu dienen, eine politische Agenda zu bedienen.

Die QALYs haben zusammen mit den verwendeten Modellen keinen erfüllten Objektivitätsanspruch. Vielmehr handelt es sich mehrheitlich um eigentliche

Fantasieprodukte, mit welchen die Gesundheitspolitik in Fragen der Bezahlbarkeit des Gesundheitswesens manipuliert werden sollen.

Mit der QALY-Methode bedient die Gesundheitsökonomie irrationale Strömungen in der Gesellschaft, mit der Folge einer möglichen Destabilisierung der Solidarität untereinander, der Entwertung der Kosteneffektivität medizinischer Handlungen und der Entwürdigung der Bedürftigsten in der Gesellschaft. QALYs bedrohen den Zusammenhalt von Gesellschaften und entfalten dissoziale Effekte.

Obwohl schon früh auf die Gefahren dieser gesundheitsökonomischen Entwicklung z.B. durch John Harris im Jahre 1987 hingewiesen wurde(5), versuchen die Protagonisten der QALY-Methode die Probleme kleinzureden, um damit ihren destruktiven Einfluss in der Gesellschaft fortführen zu können(6).

Die Schweizerische Studie

Ein besonders krasses Beispiel des Missbrauchs von QALYs in der Gesundheitsökonomie wurde kürzlich in einem Bericht der Neue Zürcher Zeitung publiziert(7,8). Es handelt sich um einen pseudowissenschaftlichen Bericht der Professoren Fink und Felder der Universität Basel unter Einschluss des Basler Public Health Instituts.

Diese Autoren untersuchen darin die Belastung der schweizerischen Bevölkerung durch Covid-19-Restriktionen. Anhand einer Befragung von nicht zufällig ausgewählten und relativ wenigen Personen meinen die Autoren herausfinden zu können, wie hoch der Nutzwert-Verlust durch die Covid-19-Restriktionen real waren. Dabei haben sie, wie in der QALY-Methode üblich, angeschaut, um wie viel Prozent die Lebensqualität durch den Lockdown reduziert wurde.

Bei der Befragung mussten sich die angefragten Personen eine Situation vorstellen, in welcher ein Lockdown zwar verordnet wurde, aber keine Pandemie existierte. Dies bedeutet, der Verlust der Lebensqualität wurde beurteilt im Rahmen einer Maßnahme, die unter diesen Bedingungen sinnlos und autoritär gewesen wäre. Hätten die Autoren die Personen befragt, ob die Lebensqualität durch einen Lockdown *während* der Pandemie ebenfalls reduziert wäre oder ob die Möglichkeit, durch den Lockdown andere Personen vor Krankheit und Tod zu schützen, nicht im Gegenteil sogar einen Gewinn an Lebensqualität bedeutet hätte, so hätten die Autoren andere Resultate erhalten, was ihnen auch bewusst sein dürfte. Es stellt sich deshalb die Frage, ob sie an einer objektiven Beurteilung überhaupt interessiert gewesen sind. Insgesamt entsteht jedenfalls der Eindruck, man habe mit einer irrealen

Umgebung für die Befragten ein manipulatives Klima geschaffen, um die Reduktion der Lebensqualität künstlich zu maximieren. Auch ist festzuhalten: Die Zahl der befragten Personen betrug 0,02% der schweizerischen Bevölkerung, wodurch ein Selektionsbias erzeugt wird. Von einer Repräsentativität kann also in keiner Weise ausgegangen werden.

Geht man etwas mehr in die Details der Antworten der Befragten, so zeigt sich, dass 626 Befragte oder 48,2 % tatsächlich behauptet haben wollen, sie würden lieber sterben als 12 Monate in den Restriktionen während des Lockdowns zu leben. Schaut man sich das Resultat der schweizerischen Abstimmungen zur Zustimmungsrates der Bevölkerung für den Lockdown an, wo jeweils in zwei Abstimmungen über sechzig Prozent der Bevölkerung dem Lockdown und dem Ausmaß des Lockdowns zugestimmt haben, erkennt man, dass die Resultate der Befragung unmöglich stimmen können. Falls hier bewusst manipuliert wurde, stellen sich auch strafrechtliche Fragen.

Auch möglich, dass die Probanden die Fragen falsch verstanden haben. Gemäß epidemiologischer Praxis nach GEP (good epidemiological practice) jedenfalls hätte zunächst eine Pilotphase durchgeführt werden müssen, um die Verständlichkeit der Fragen zu prüfen, was nicht getan wurde. Gemäß den Autoren würde nun also die Lebensqualität durch den erwähnten Lockdown außerhalb der Pandemie (wie gesagt, schon in der Anlage eine falsche Studien-Anlage) um 39% reduziert werden. Wie erwähnt, fehlt hier der Nutzen des Helfens im Lockdown zur Vermeidung von Tod und Krankheit vollständig. Damit ist schon von der Studien-Anlage her klar, dass die Resultate den Nutzen eines Lockdowns in der Pandemie in keiner Weise abbilden können und entsprechend daraus auch keine Schlüsse auf der politischen oder gesellschaftlichen Ebene gezogen werden dürfen.

Doch es gibt noch weitere Hinweise, dass diese Studie, wenn nicht gefälscht, so doch grobfahrlässig unwissenschaftlich erstellt wurde. So gaben die Probanden etwa an, dass sie bis zu 60% ihres Einkommens hergeben würden, um den Lockdown zu umgehen. Wir müssen uns dabei vor Augen halten, dass dieses Resultat für die schweizerische Bevölkerung gelten soll. Nun folgen die Autoren aus diesem unrealistischen Resultat aber nicht etwa, dass dringend weitere Studien notwendig seien, um diese zu überprüfen. Vielmehr nehmen sie ihre Resultate für bare Münze. Ja, sie gehen sogar noch einen Schritt weiter, indem sie die Zahl der verlorenen QALYs aufrechnen diese mit den durch die Covid-19 Infektion verstorbenen Personen in der Schweiz im Jahr 2021 vergleichen.

Demnach hätte die Schweizer Bevölkerung durch den Lockdown 5,6 Millionen QALYs, was 5,6 Millionen Todesfällen entspricht, verloren. Die Übersterblichkeit während dieser Periode

durch Covid-19 betrug jedoch lediglich rund 100'000 Tote. Damit erstellen die Autoren eine nachgerade menschenverachtende(9) Berechnung: Sie setzen den völlig unwahrscheinlichen Verlust von Lebensqualität durch den Lockdown in der schweizerischen Bevölkerung im Jahr 2021 mit 5,6 Millionen Todesfällen gleich. Dies wurde an anderer Stelle als ethisch inakzeptabel erkannt(10). In den Schlussfolgerungen sagen die Autoren dann konsequenterweise, dass in künftigen politischen Entscheiden das Ausmaß eines Lockdowns gegenüber dem Potential eines Nutzens bei der Krankheitsübertragung abgewogen werden muss.

Ein weiterer gravierender Mangel ist die fehlende Sensitivitätsanalyse. Wenn schon beliebige Modelle verwendet werden, so sollten diese auch nach Belieben *variiert* werden. Folgende Szenarien könnten in der Sensitivitätsanalyse zutreffen:

So kann man davon ausgehen, dass der Wert eines statistischen Lebensjahres (VSLY) 200 000 CHF für 1 Jahr beträgt. Die Studie von Felder und Fink ergibt hier einen Wertverlust von 1 108 Mrd. CHF. Wir berechnen 4 Szenarien aus unserer Institution (VEMS 1-4). Wir schätzen den Trade-off zwischen egoistischem QALY-Verlust (Felder-Szenario) aufgrund von Restriktionen und dem Wert der Hilfe in einer sozialen Gesellschaft (VEMS-Szenario) als etwa gleich gross ein und berechnen den QALY-Verlust daher auf 1% oder 56 373 der egoistischen und des sozialen QALY-Verlustes aufgrund von Lockdown oder Restriktionen. In dieser Sensitivitätsanalyse ergibt sich ein Gewinn von 7,8 Milliarden (VEMS 1). Rechnet man die angenommenen Kosten für die Intensivstation derjenigen hinzu, die ihr Leben verloren haben, ergibt sich ein Gewinn durch die Einschränkungen von 26,9 Mrd. CHF (VEMS 2). Rechnet man die Kosten der kurz- und langfristigen COVID-19-Erkrankung für 1 Mio. Patienten hinzu, ergibt sich ein Kompromiss von 27,1 Mrd. CHF (VEMS 3). In der Szenarioanalyse der gesellschaftlichen Verelendung durch den Bergamo-Effekt erwarten wir 315 999 verlorene Lebensjahre im Jahr 2020, die egoistischen QALYs sind gleich den gesellschaftlichen QALYs, und der Tradeoff führt zu einem Nettogewinn von 1 191 Mrd. CHF.

Es ist klar, dass das Resultat der Studie von Felder und Fink die politischen Maßnahmen des Lockdowns vehement in Frage stellen und damit einer Entsolidarisierung in der Bevölkerung Vorschub leisten. Das Konzept dieser Studie deutet leider darauf hin, die Autoren hätten die Studie so konzipiert, dass herauskommt, was (vielleicht im Rahmen einer politischen Agenda) «bewiesen» werden soll.

Da solche Studien unter dem Deckmantel von universitären Instituten erstellt werden, gewinnen sie eine gewisse Glaubwürdigkeit und Unantastbarkeit. Da diese Studie jedoch in keiner Weise der good epidemiological practice entspricht und im Ergebnis eine gefährliche Entsolidarisierung der Gesellschaft bewirkt, muss sie zurückgezogen werden. Weitere Maßnahmen, insbesondere zur Verhinderung von solchen konstruierten Produkten, sind einzuführen, und es wäre allenfalls zu überlegen, wie weit die Autoren wegen illegaler Praktiken sanktioniert werden müssen.

Die Welt-Studie

Doch die Autoren haben es nicht bei dieser einen Studie bleiben lassen, im Gegenteil haben sie ihre «Methode» auch auf die ganze Welt angewandt und in einem renommierten medizinischen Journal publiziert(11).

Auch in dieser Studie wurden zahlreiche epidemiologische Fehler betreffend der good epidemiological practice begangen. Konkret wurden Personen im Rahmen des MTurk Netzwerkes befragt, und es wurde behauptet, dass die Resultate aus den Befragungen im Rahmen dieses Netzwerkes verlässlich seien. Die Personen, welche in diesem Netzwerk arbeiten, sind jedoch häufig jünger (in der Regel sind 66% dieser befragten Personen zwischen 18 und 39 Jahre alt).

Hier wurden die Befragten mit einer Situation konfrontiert, in welcher für den Lockdown keine wirkliche Begründung vorlag. Was heißt, dass auch hier der soziale Aspekt des Nutzens des Lockdowns zum Schutz von Personen in der Bevölkerung vollständig ausgeblendet wurde.

Falsch ist auch, wenn die Autoren behaupten, die interessierende Variable sei der gesamte Verlust an QALYs wegen Covid-19-Restriktionen. Wie wir gesehen haben, betraf das Framing der Fragen ja gerade eine Situation *außerhalb* der Pandemie. Ferner sprechen die Autoren von einer Repräsentativität der Befragten für sämtliche Länder auf dieser Welt, für welche die Berechnungen durchgeführt wurden. Dass insgesamt weniger als 1000 Personen für eine Weltbevölkerung von 8'000'000'000 Menschen repräsentativ sein sollen, ist aber natürlich absurd. Im Gegenteil zeigt der Anspruch der Autoren, mit einer kleinen Anzahl von Befragten, welche womöglich auch die Fragen falsch verstanden haben könnten, ein Abbild der ganzen Welt schaffen zu wollen, dass hier mehr Hybris als sachliche Wissenschaftlichkeit am Werk war. Den Autoren zufolge wurden weltweit durch Lockdowns 3,259 Milliarden QALYs verloren. Dies entspricht somit dem QALY-Tod der halben Menschheit. Auch hier wurde der Nutzwert des Lockdowns für die Gesellschaft durch Vermeidung eines asozialen Verhaltens komplett ausgeblendet.

In den Schlussfolgerungen zur Welt-Studie behaupten die Autoren schliesslich, die verlorenen QALYs seien wegen dem Lockdown aufgetreten, was, wie erwähnt, nicht zutrifft, weil die Lockdown-Massnahmen im Rahmen der Fragestellung an die Probanden nicht wegen einer Pandemie stattfanden.

Die Autoren schließen, dass die Regierungen auf dieser Welt die negativen Auswirkungen des Lockdowns in der Bevölkerung massiv unterschätzen und dass viele Menschen bereit wären, zwischen 10% bis 60% ihres Einkommens zu verwenden, um solche Lockdowns zu vermeiden. Es muss an dieser Stelle erwähnt werden, dass die Studie anhand von Befragungen in fünf Ländern mit 947 befragten Personen oder 0,000011 % der Weltbevölkerung erfolgte, was zu einem massiven Selektionsbias führt. Zwar erwähnen die Autoren dann doch an einer Stelle, dass die Befragung außerhalb der Pandemie-Situation gestellt wurde, sie würden aber davon ausgehen, dass der Verlust an Lebensqualität auch in dem Pandemie-Situation genau gleich wäre, wobei sie für diese Behauptung allerdings keine Argumente liefern. Das hat, mit Verlaub, schon mehr mit Kaffeesatzlesen zu tun als mit Wissenschaft.

Fazit

Da die Schlussfolgerungen der beiden Studien auf einer wissenschaftlich-methodisch nicht abgesicherten Methode beruhen, sind ihre Resultate abzulehnen. Ob beabsichtigt oder grobfahrlässig, im Ergebnis handelt es sich sowohl bei der Schweizerischen als auch bei der Welt-Studie um eine Irreführung der Öffentlichkeit betreffend den Nutzen eines Lockdowns für Gesellschaften. Entsprechend sollten diese Studien zurückgezogen werden.

Anmerkung: Bereits 2014 hat Prof. Felder eine Studie vorgelegt, in welcher er im Rahmen der Aktivitäten des Swiss Medical Boards fehlerhafte Berechnungen zur Kosteneffektivität von Statinen in der Grundversorgung vorgelegt hat(12). Zwischenzeitlich wurde mit einer Studie im Auftrag des Bundesamtes für Gesundheit der Fehler der Statinstudie des Swiss Medical Boards berichtet. Weitere Informationen: <https://varifo.ch/swiss-medical-board/>

Misleading the world and Swiss society through manipulative QALY studies on the pandemic situation by professors from Basel universities

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Abstract:

Two professors from the University of Basel in the fields of public health and health economics present two QALY studies on the usefulness of the lockdown during the pandemic, but interview people about the loss of quality of life for the situation outside of a pandemic. The authors arrived at incorrect results with this study design. The gain in quality of life through the solidary society to protect vulnerable people is ignored. As a result, a destabilization of the solidarity of society is promoted. Both studies must therefore be withdrawn.

Introduction:

In Switzerland, QALYs are used to influence public opinion about the usefulness of medical interventions. In fact, QALY are unable to form a solution to questions of cost-effectiveness(1). However, the QALY method is not questioned, although the results derived from the health economic models are anything but plausible(2). Despite these serious shortcomings, there is no critical discourse on QALYs in Switzerland, and the QALY method is funded by the state(3). The fact is that in many countries, such as Germany, QALYs are not used because they are ethically problematic. A detailed summary of the ethical problems surrounding QALYs was already prepared by the German Ethics Council in 2011 (4). Based on its analysis of the QALYs, the German Ethics Council has also determined that QALYs reflect utilitarian ethics. Despite massive shortcomings of this health economic method, the number of QALY publications worldwide is now almost 1,000 per year (<https://cevr.tuftsmedicalcenter.org/databases/cea-registry>). There are various reasons for this. Firstly, the models used can be made cheaply as they are mostly imaginary or based on insufficient research. The public surveys in particular are particularly susceptible to falsification and misleading. Second, the assumptions in the models can be manipulated at will, which means that any results can be generated, which can be manipulated depending on the client. Third, the vulnerability of QALY studies to manipulation harbors the danger that they serve to serve a political agenda.

The QALYs, together with the models used, have no fulfilled claim to objectivity. Rather, the majority of these are actually fantasy products with which health policy is to be manipulated in questions of the affordability of the health care system.

With the QALY method, health economics serves irrational currents in society, with the result of a possible destabilization of solidarity among each other, the devaluation of the cost-effectiveness of medical actions and the degradation of those most in need in society. QALYs threaten the cohesion of societies and develop dissocial effects.

Although the dangers of this health economic development were pointed out early on, for example by John Harris in 1987(5), the protagonists of the QALY method try to downplay the problems in order to be able to continue their destructive influence on society(6).

The Swiss study

A particularly blatant example of the misuse of QALYs in health economics was recently published in a report in the *Neue Zürcher Zeitung*(7,8). It is a pseudo-scientific report by Professors Fink and Felder of the University of Basel, including the Basel Public Health Institute.

In it, these authors examine the burden on the Swiss population from Covid-19 restrictions. Based on a survey of non-randomly selected and relatively few people, the authors think they can find out how high the loss of utility value due to the Covid 19 restrictions was in reality. As is usual in the QALY method, they looked at the percentage by which the quality of life was reduced by the lockdown.

During the survey, the people asked had to imagine a situation in which a lockdown was ordered but no pandemic existed. This means that the loss of quality of life was assessed within the framework of a measure that would have been meaningless and authoritarian under these conditions. If the authors had asked the people whether the quality of life would also have been reduced by a lockdown *during* the pandemic or whether the possibility of protecting other people from illness and death through the lockdown would not have actually meant an improvement in quality of life, they would have Authors get different results, which they should also be aware of. The question therefore arises as to whether they were at all interested in an objective assessment. In any case, the overall impression is that a manipulative climate has been created for the interviewees with an unreal environment in order to artificially maximize the reduction in quality of life. It should also be noted that the number of people questioned was 0.02% of the Swiss population, which creates a selection bias. A representativeness can therefore in no way be assumed.

Digging a little more into the details of respondents' responses, it shows that 626 respondents or 48.2% actually claim they would rather die than live 12 months in lockdown

restrictions. If you look at the result of the Swiss votes on the approval rate of the population for the lockdown, where in two votes more than sixty percent of the population approved the lockdown and the extent of the lockdown, you can see that the results of the survey cannot possibly be correct. If there was deliberate manipulation here, criminal law issues also arise.

It is also possible that the subjects misunderstood the questions. According to epidemiological practice according to GEP (good epidemiological practice), a pilot phase should have been carried out first to check the comprehensibility of the questions, which was not done. According to the authors, the quality of life would now be reduced by 39% as a result of the aforementioned lockdown outside of the pandemic (as I said, a wrong study system in the annex). As mentioned, the benefit of helping out in lockdown to avoid death and illness is completely absent here. It is therefore already clear from the design of the study that the results cannot in any way reflect the benefits of a lockdown in the pandemic and accordingly no conclusions may be drawn from them at the political or social level.

But there are further indications that this study, if not falsified, was at least grossly negligently unscientific. For example, the subjects stated that they would give up to 60% of their income to avoid the lockdown. We have to keep in mind that this result should apply to the Swiss population. However, the authors do not conclude from this unrealistic result that further studies are urgently needed to check them. Rather, they take their results at face value. Yes, they even go a step further by counting the number of lost QALYs compared to the number of people who died from the Covid-19 infection in Switzerland in 2021.

According to this, the Swiss population would have lost 5.6 million QALYs due to the lockdown, which corresponds to 5.6 million deaths. However, the excess mortality during this period from Covid-19 was only around 100,000 deaths. The authors are thus making a downright inhuman(9) calculation: They equate the completely improbable loss of quality of life due to the lockdown in the Swiss population in 2021 with 5.6 million deaths. This has been recognized elsewhere as ethically unacceptable(10). In the conclusions, the authors then consistently say that future policy decisions must weigh the extent of a lockdown against the potential benefit in disease transmission.

Another serious deficiency is the missing sensitivity analysis. If any models are already used, these should also be *varied* as desired. The following scenarios could apply in the sensitivity analysis:

So it can be assumed that the value of a statistical year of life (VSLY) is CHF 200,000 for 1 year. The study by Felder and Fink shows a loss in value of CHF 1,108 billion. We calculate 4 scenarios from our institution (VEMS 1-4). We estimate the trade-off between selfish QALY loss (fields scenario) due to restrictions and the value of aid in a social society (VEMS scenario) to be about the same and therefore calculate the QALY loss to be 1% or 56 373 of selfish and social QALY loss due to lockdown or restrictions. This sensitivity analysis yields a gain of 7.8 billion (VEMS 1). If one adds the assumed costs for the intensive care unit of those who lost their lives, the gain from the restrictions is CHF 26.9 billion (VEMS 2). Adding the costs of short- and long-term COVID-19 disease for 1 million patients results in a compromise of CHF 27.1 billion (VEMS 3). In the scenario analysis of the societal

impoverishment caused by the Bergamo effect, we expect 315,999 years of life lost in 2020, the selfish QALYs are equal to the societal QALYs, and the tradeoff results in a net gain of CHF 1,191 billion.

It is clear that the result of the study by Felder and Fink vehemently questions the political measures of the lockdown and thus promotes a loss of solidarity among the population. Unfortunately, the design of this study suggests that the authors designed the study in such a way that what should be "proved" (perhaps within the framework of a political agenda) comes out.

Because such studies are done under the guise of university institutes, they gain a certain credibility and sanctity. However, since this study in no way corresponds to good epidemiological practice and as a result causes a dangerous loss of solidarity in society, it must be withdrawn. Further measures, in particular to prevent such constructed products, should be introduced, and it might be worth considering to what extent the authors should be sanctioned for illegal practices.

The world study

But the authors didn't stop with this one study; on the contrary, they applied their "method" to the whole world and published it in a renowned medical journal(11).

In this study, too, numerous epidemiological mistakes were made regarding good epidemiological practice. Specifically, people were interviewed within the MTurk network and it was claimed that the results of the interviews within this network were reliable. However, the people who work in this network are often younger (typically 66% of those interviewed are between 18 and 39 years old).

Here the respondents were confronted with a situation in which there was no real justification for the lockdown. Which means that here, too, the social aspect of the use of the lockdown to protect people in the population was completely ignored.

It is also wrong when the authors claim that the variable of interest is the total loss of QALYs due to Covid-19 restrictions. As we have seen, the framing of the questions related to a situation *outside* of the pandemic. Furthermore, the authors speak of the representativeness of the respondents for all countries in the world for which the calculations were carried out. That a total of less than 1000 people should be representative of a world population of 8,000,000,000 people is of course absurd. On the contrary, the authors' claim to want to create an image of the whole world with a small number of respondents, who may have misunderstood the questions, shows that there was more hubris than factual scientificity at work here. According to the authors, 3.259 billion QALYs were lost globally due to lockdowns. This corresponds to the QALY death of half of humanity. Here, too, the benefit of the lockdown for society by avoiding antisocial behavior was completely ignored.

Finally, in the conclusions to the world study, the authors claim that the lost QALYs occurred because of the lockdown, which, as mentioned, is not true because the lockdown measures in the context of the question to the subjects did not take place because of a pandemic.

The authors conclude that governments around the world massively underestimate the negative impact of the lockdown on the population and that many people would be willing to use between 10% and 60% of their income to avoid such lockdowns. It must be mentioned here that the study was conducted using surveys in five countries with 947 respondents or 0.000011% of the world population, which leads to a massive selection bias. Although the authors do mention at one point that the survey was conducted outside of the pandemic situation, they would assume that the loss of quality of life would be exactly the same in the pandemic situation, although they did not provide any arguments for this claim deliver. With all due respect, this has more to do with reading coffee grounds than with science.

Conclusion

Since the conclusions of the two studies are based on a method that is not scientifically and methodically proven, their results should be rejected. Whether intentional or grossly negligent, the result is that both the Swiss and the world study mislead the public regarding the benefits of a lockdown for societies. Accordingly, these studies should be withdrawn.

Note: Prof. Felder already presented a study in 2014 in which he presented incorrect calculations on the cost-effectiveness of statins in primary care as part of the activities of the Swiss Medical Board(12). In the meantime, the error in the Swiss Medical Board's statin study has been corrected with a study commissioned by the Federal Office of Public Health. Additional Information: <https://varifo.ch/swiss-medical-board/>

Appendix 2: Detailed discussion of the two papers

Burden of Covid-19 Restrictions in Switzerland: Evidence form the 2022 LINK Covid Survey, a paper presented by Günter Fink and Stefan Felder in February 2022 (8)

This paper is discussed as follows:

- (1) Authors write in the introduction: "Despite these less restrictive policies, resistance in the country was substantial, with continued protests against government mandates ".
 - a. As a matter of fact, however, there were two national polls about these restrictions, and over 60% of the Swiss populations supported restrictions due to the Covid Pandemic. Following a referendum, the electorate approved the law with 60 percent on June 13, 2021. On November 28, part of the law was

put to the vote again after another referendum. Now, five months later, in November 2021, Switzerland is even more clearly in favor of the Covid law, with 62.0% voting yes (1).

b. *So, in this work, the authors want to serve a democratic minority.*

(2) “In order to quantify the average subjective utility losses in Switzerland, we embedded previously developed survey modules in an ongoing national survey in Switzerland in February 2022 – results of this survey are presented here.”

a. The authors now claim that they will present a study on the average reduction in quality of life for the whole of Switzerland.

b. *This appears to be in contradiction to (1) and has several methodological flaws. Further, the utility of helping others and therefore preserving value is not addressed (13)*

(3) “Imagine a world without COVID-19. You must choose to live in one of the following two countries. The countries differ both in the salary you earn and the restrictions that the government has decided on for everyday life. In which of the two countries would you prefer to live and work?”

a. Utility was therefore measured for a situation, where the restrictions had no apparent reason. Authors should have contrasted their results with a sample, where persons were asked to imagine a COVID-19 situation.

b. The utility of helping others not to become infected due to restrictions was not measured.

(4) Table 1: sample size was only 1299, which represents 0.02% of the Swiss population.

a. A selection bias is likely to have occurred.

b. The representativeness bias has not been excluded due to methodological issues.

(5) Observed time trade-offs: 626 respondents (48.2 %) indicated that they would rather not have any life (0) than living 12 months with restrictions.

a. This means, that 48.2% of respondents would prefer to be dead instead of following the restrictions.

b. Such a statement can hardly apply to 48% of the Swiss population. Obviously, the question was asked incorrectly or misunderstood.

c. In any case, a pilot test should have been carried out to prevent complete nonsense like in these statements from resulting due to wrong understanding or wrong posing of the questions.

d. Since this pilot test was not performed, the rules of good epidemiological practice have been violated.

- (6) Figures 2 and 3 show the disutilities to be 39% on average for restrictions, therefore, loss of life quality would be around 39%
- a. The utility of helping others in the pandemic (3b) was again completely ignored.
- (7) Figure 4 shows willingness to pay per month and restriction variable was between 663 and 4520 CHF
- a. In respondents earning money around 6000 CHF per month, and who would give or than 60% of the salary income for being able to participate in private parties, we understand that such an answer is beyond rational thinking.
 - b. We have to keep in mind, that this result is an average of the Swiss population.
 - c. Obviously, there is another perception bias committed by the interviewers or the respondents. At least, authors should have tried to validate such results with other samples and with other questions.
- (8) Table 3 plots the 95 551 years of life lost against the 5,637,281 QALY lost.
- a. Since 1 QALY can be viewed as 1 year of life lost, the lockdown associated restrictions were much “deadlier” with 5.6 Mio deaths when compared to the 0.1 Mio deaths
 - b. From these numbers, the restrictions lead to 59 times more loss of lives deduced from QALY.
- (9) “These private costs associated with each strategy should be weighed against potential disease transmission benefits in future policy decisions.”
- a. Therefore, in the authors view, restrictions should be reduced in order to increase quality of life at the trade-off of lost lives in Switzerland.

Comments

The value of life may be quantified, in order to generate a scenario analysis. We make the following assumption that the value of a statistical life-year (VSLY) be 200 000 CHF for about 1 year. The study by Fink and Felder results here in a value loss of 1 108 billion of CHF. We calculate 4 scenarios from our institution (VEMS 1-4). We estimate the trade-off between egoistic loss of QALY (Felder scenario) due to restriction against the value of help in a social society (VEMS scenario) as about equal and we calculate the loss of QALY as being therefore 1% or 56 373 of the egoistic minus social QALY lost due to lockdown or restrictions. In this sensitivity analysis, the result is a gain of 7.8 billion (VEMS 1). Adding presumed ICU costs of those who lost their lives, we calculate a gain of restrictions of 26.9 billion CHF (VEMS 2). Adding cost of short- and long-term COVID-19 disease to 1 Mio patients, tradeoff is 27.1 billion CHF (VEMS 3). In the scenario analysis of societal destitution due to the

Bergamo effect we expect 315 999 lost life years in the year 2020, egoistic QALY are equal to societal QALY and the tradeoff results in a net gain of 1 191 billion CHF.

Table 1: Sensitivity Analysis of QALY lost and cost gained calculated with 5 assumptions (as explained in the comments section)

Scenario Analysis	Felder	Vems 1	Vems 2	Vems 3	Vems 4
Expected lost life years	95 551	95 551	95 551	95 551	315 599
Expected lost QALY	5 637 281	56 373	56 373	56 373	0
Cost WTP per QALY	200 000	200 000	200 000	200 000	200 000
Cost of QALY	1 127 456 200 000	11 274 562 000	11 274 562 000	11 274 562 000	0
Cost per VSLY (+ICU VEMS 2)	200 000	200 000	400 000	400 000	200 000
Cost lost life years	19 110 200 000	19 110 200 000	38 220 400 000	38 220 400 000	63 119 800 000
Cost of 200000 QALY due to Covid disease und Long Covid per 1 Mio infected				180 000 000	
Destitution of society due to Bergamo effect without lockdown or restrictions					1 127 456 200 000
Total Tradeoff in CHF	1 108 346 000 000	-7 835 638 000	-26 945 838 000	-27 125 838 000	1 190 576 000 000

Conclusions

The study by Fink and Felder about the loss of QALY does not support the conclusions, because responders had to think of a scenario not related to the pandemic situation. There are several issues regarding sample size, representativity and lack of protocol validation. These problems invalidate the findings and do not add scientific knowledge to our society. The paper should be withdrawn.

Reference: <https://www.swissinfo.ch/ger/resultat-covid-gesetz-zertifikat/47141410>

Burden of Covid-19 restrictions: National, regional and global estimates
www.thelancet.com Vol 45 Month March, 2022 (11)

This paper is discussed as follows:

- (1) Authors write in the methods section: “MTurk has been used in a growing number of studies, and is considered an affordable and reliable source of human participants “.
 - a. The cited paper about ethical issues regarding the work of MTurk (14) does in fact not address the reliability of the MTurk method. The U.S. MTurk participants are also not balanced regarding age (66% are aged between 18 and 39 years), which may introduce a bias in the utility results.

- b. The representativeness of MTurk results for countries was questioned (15) and the reliability was inferior to standard measures (16)
 - c. *Therefore, the reliability of the utility results has not been formally tested and the MTurk method, at least within the context of this study, has not been validated.*
- (2) Authors asked MTurk participants: “Assume a world without COVID-19, and that you have only a limited amount of time left to live.”
 - a. The restrictions were therefore imposed without a reason, e.g., respondents would not consider the situation where restrictions were associated with utility due to protection of respondents and other individuals in the society.
- (3) Primary outcome variables: “The primary outcome variable of interest was the total number of QALYs lost due to Covid-19 restrictions”.
 - a. This is misleading, it should write: “The primary outcome variable of interest was the total number of QALYs lost due to Covid-19 restrictions in a scenario not considering the pandemic”.
- (4) Primary outcome variables: “Covid-19 specific framing”
 - a. Again, this is misleading, since the scenarios were explicitly addressed to a scenario not considering the pandemic. It should write: “Period of 12 months framing”.
- (5) “The original survey questions (in English) are provided in Supplemental Appendix A1. Translations to French and Italian were made by the research team.”
 - a. The translated text should also have been published and validated
- (6) “To ensure representativeness within countries, post stratification weights were computed for each age”
 - a. the validity of this approach is not presented
- (7) “Due to the absence of identifiable data, the requirement for ethics approval was waived by the Swiss national ethics commission (EKNZ Req 2021.00616).”
 - a. Several ethical questions about the study design have not been addressed
 - i. Study design
 - ii. Validity of QALY
 - iii. Ethical aspects of the questions in Appendix A1
- (8) Respondent characteristics
 - a. There are no data about the representativeness of the respondent sample, e.g., average age of the Swiss population is 42 years, while respondents age was 36 years on average.
- (9) “Globally, an estimated total of 3259 million QALYs”

- a. This number does exclude the utility of avoiding deaths and disability due to Covid-19.
- b. The comparison with life-years lost is therefore not correct
- (10) Willingness to pay.
 - a. Discrepancy with Swiss survey, where instead of 10% up to 60% of salaries would have been payed to avoid restrictions.
- (11) Approvement of governmental measures appears correct
- (12) Discussion:
 - a. "In this paper, we show that the societal burden of Covid19 related restrictions as of September 6, 2021 amounts to more than three billion QALYs."
 - i. This is misleading, it should read:" In this paper, we show that the societal burden of ~~Covid19-related~~ unfounded restrictions ~~as of September 6, 2021~~ amounts to more than three billion QALYs."
 - b. "Nevertheless, our results do strongly suggest that the societal costs of any restrictive measures taken by governments may be larger than what is commonly acknowledged, and that most citizens would likely be willing to give up a substantial fraction of their incomes to avoid several of these measures in the future."
 - i. The results of this study do not suggest, what the authors name, because the utility of appropriateness of governmental measures was excluded in the QALY questions.
 - c. "Even though this study is to our knowledge the first attempt to quantify the societal impact of Covid-19 restrictions at both the national and global level, several limitations are worth highlighting."
 - i. This is not an attempt about COVID-19 restrictions, but about unfounded restrictions
 - d. Limitations: only 5 countries extrapolated to the whole world using 947 or 0.000011 % of the world population, which is therefore prone to severe selection bias.
 - e. "Conceptually, framing restrictions as related to Covid-19 may lead to subjects justifying these measures as necessary and assigning lower disutility. On the other hand, it may be hard to imagine life with restrictions outside of Covid-19. Our results suggest that very similar responses are obtained with both types of framing"
 - i. Since all questions were framed outside COVID-19, this statement is fraudulent.

- f. “A related concern is that survey respondents may not be able to exactly quantify the relative utility of life with restrictions”
 - i. This concern is not substantiated by anything, pure phantasy in order to lend support to the study concept
 - g. “We believe that the magnitudes reported here – about a quarter of life quality lost due to light restrictions, and about a third due to severe restrictions – is reasonable. Both states are clearly preferred to paraplegia as a more severe health state by respondents as one may expect”
 - i. This belief is not supported by normal human reasoning, since disutility of restriction is outweighed by utility of protection in a pandemic situation. The statement about paraplegia to underscore the authors view has no scientific relation to the result.
 - ii. The study design does not reflect the condition of a social human society
 - h. “In summary, the results presented here highlight the very high societal cost of non-pharmaceutical interventions to prevent the spread of infectious diseases such as Covid-19 in terms of quality of life lost. Future policy decisions should take these societal costs into consideration, and try to balance likely reductions in disease transmission from specific measures against their impact on individual and aggregate quality of life. »
 - i. The results do not highlight the societal cost of interventions, because the COVID-19 pandemic situation was explicitly excluded in the questions.
 - ii. Therefore, this societal cost are a manipulation of respondents and do not reflect the real utility of restrictions in real life.
- (13) In summary, the paper does not meet appropriate epidemiological standards of good practice, is in part fraudulent and should be withdrawn.

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