*Conference **1***

Dr Roland STETTLER (CH)
28/07/2022

In touch and yet alone
– loneliness in the era of social media -

At the very beginning of the Bible, in the story of creation, God states (Genesis 2:18): "It is not good that man should be alone". It was not for no reason that Aristotle later referred to humans as "zoon politikon", in other words as "communal animals", because among mammals, humans are actually the species that are particularly directed towards a life in community. And now suddenly books are coming onto the market with titles like "Einsamkeit. Die unerkannte Krankheit" (Loneliness: The Unrecognised Disease) by Manfred Spitzer, a well-known German professor of psychiatry (Spitzer 2018) or the recently published book by the English professor of economics Noreena Hertz "The Lonely Century. A Call to Reconnect." (Hertz, 2020). There is talk of the "megatrend of loneliness", of loneliness as a far-reaching health crisis that is hidden as a "shadow pandemic" behind the headlines about Covid-19. And for some time now, we have been able to find food and hygiene products on supermarket shelves in ever smaller packages, a reflection of the fact that there are more and more single households. And instead of meeting for a chat with friends in a buvette on the beautiful Rhine after a long day at work, people now sit down - usually alone - in front of the TV. What has happened to the "zoon politikon"? The conference "Solitude and Isolation in Healthcare" by Médecine de la Personne seems more relevant than one would like.

Subjective experience or objective fact - How to define and measure loneliness?

First of all, it is important to note that loneliness and social isolation are not the same. **Loneliness** refers to a subjective experience - one feels lonely. The existing social relationships and contacts are not of the desired quality and/or are fewer in number than a person would like. **Social isolation** is the objective state of being alone, which can be quantified. Many people enjoy being alone without suffering from it. Conversely, however, there are also people who feel lonely even though they are integrated into a large social network seen from the outside. According to scientific studies, the proportion of people who experience both loneliness and social isolation is smaller than one would expect, namely around 20% (Coyle & Dugan 2012). It can certainly be said, and this probably corresponds with the experience we all share, that the quality of our social ties is far more important than their quantity. A friend who is with us through thick and thin is more important than 500 virtual acquaintances in an online network.

If you want to know your level of social isolation, go through the five statements in the table below and give yourself one point for each item you answer "YES" to:

1	Unmarried / not cohabiting
2	less than monthly contact (including face-to-face, telephone, or written / e-mail contact) with each of children
3	less than monthly contact (including face-to-face, telephone, or written / e-mail contact) with other family members
4	less than monthly contact (including face-to-face, telephone, or written / e-mail contact) with friends
5	not participate in organizations such as social clubs or residents groups, religious groups, or committees

If you have a score of 0 or 1, you would be classified by the authors of the questions (Steptoe et al. 2013) as having a low level of social isolation, while a score of 2 or more would classify you as highly isolated.

In order to quantitatively measure individual feelings of loneliness, researchers at the University of California, Los Angeles (UCLA) developed the UCLA Loneliness Scale as early as 1980 (Russell & al. 1980), which was applied in many studies. More recently, the Three-Item Loneliness Scale (Hughes & al. 2004) has been increasingly used because it is shorter and therefore more efficient for large surveys. Here, too, I invite you to test the extent to which you experience loneliness yourself, because loneliness is not at all uncommon even among busy doctors (Ofei-Dodo & al. 2021). At the beginning of the test, the following introductory sentence is read to the person: " The next questions are about how you feel about different aspects of your life. For each of the following questions, please tell me how you feel that way." Now go through the three items for yourself and ask yourself in each case whether this applies to you often (2 points), sometimes (1 point) or rarely (0 points).

1	How often do you feel that you lack companionship: Hardly ever, some of the time, or often?
2	How often do you feel left out: Hardly ever, some of the time, or often?
3	How often do you feel isolated from others? Hardly ever, some of the time, or often?

If you have a sum score of 0 to 2, you are marginally or averagely lonely. If you have a score of 3 or more, the authors of this questionnaire would rate you as highly lonely.
And how did you score? I assume, of course, that doctors who are involved in "Medicine of the Person" will all have zero points, am I wrong?

Noreena Hertz even goes beyond the personal in her definition of loneliness. She assumes that the feeling of loneliness is not only triggered by a lack of support or neglect in the family or the social context, but that people also feel increasingly excluded from a political and economic point of view.

Loneliness also includes the fact that so many people feel powerless, invisible and not listened to in the world of work and politics. Loneliness goes well beyond the human need for emotional closeness, "for it is also an expression of the human need to be heard and seen, to be cared for, to be able to act freely, to be treated kindly, fairly and respectfully." (Hertz, 2020, p. 20 in the German translation of the book).

This broader view of the problem of loneliness can also be justified empirically. Even in the years before the coronavirus pandemic, two-thirds of all people living in a democracy did not think that their government was acting in their best interests. 85% of all employees worldwide feel they have no connection to their company or their work (Boucek, 2018). Only 30% of Americans thought the majority of their peers were trustworthy - a significant decline since 1984, when it was only half. It is not surprising that in a world that is so polarised, fragmented and divided, populists have it easy, but they have no solutions except to deepen the divisions even further.

Loneliness makes you ill

Loneliness makes you ill. This is obvious when we consider that people who feel lonely are chronically stressed. If people suffer from loneliness for a longer period of time, the likelihood of developing hypertension, metabolic disorders such as diabetes or obesity, vascular diseases such as coronary heart disease, a myocardial infarction or a stroke increases. Sleep problems and depression can also be caused by loneliness. Loneliness also has an unfavorable influence on the immune system and thus on the development and course of infections and of cancer (Pinquart & Duberstein 2010).

As a psychiatrist and psychotherapist, I know only too well that loneliness is the problem of mentally ill people everywhere. This is due not least to the fact that mental illness and loneliness often form a vicious circle of mutual reinforcement: On the one hand, mental illness causes feelings of loneliness; on the other hand, experiences of loneliness can contribute to or significantly intensify the disorder. Often, fellow human beings are also unsettled by the behaviour of mentally ill people and turn away from them. This often leads to objectively detectable social isolation. In addition, feelings of loneliness are often suppressed by taking addictive substances, in a sense, by inadequate self-treatment. Therefore, it is advisable in all cases of addiction to systematically ask about social isolation and loneliness (Hosseinbor and al. 2014). Last but not least, it is worth mentioning that loneliness also causes dementia to progress at a faster rate.

It cannot be emphasized sufficiently that both social isolation as objectively assessed, and the experience of loneliness are associated with an increased risk of death. Compared to the risk factors of air pollution, lack of exercise, poor nutrition, obesity, smoking and heavy alcohol consumption, the negative effects of loneliness and social isolation on health and life expectancy are greater. Unfortunately, this knowledge, which has been confirmed several times (Holt-Lundstad & al. 2010 and 2015), is still hardly acknowledged. In many countries, we are still a long way from taking consistent measures to address these inherently preventable risk factors.

Age of Loneliness – What do the Numbers tell us ?

Even before the coronavirus triggered a decline in social life with lockdown and social distancing, three out of five adults in the USA described themselves as lonely. In Europe, the situation was

similar. Two-thirds of the German population considered loneliness a major problem. Almost a third of Dutch citizens admitted to being lonely, one in ten even to being particularly lonely. In Sweden, up to a quarter of the population reported being lonely. And among the Swiss, two out of five people said they felt lonely sometimes, often or always. Alarmingly high figures!

In the UK, the problem was considered so serious by politicians that in 2018, the then Prime Minister, Theresa May, even appointed a "Minister for Loneliness". One in eight Britons did not have even one good friend. Three quarters of citizens did not know the names of their neighbours and 60 per cent of British employees felt lonely at work. The figures for Asia, Australia, South America and Africa were similarly worrying (after Hertz, 2020). However, a recently published systematic review and meta-analysis (Surkalim & al. 2022) noted that little reliable data exists, especially for low- and middle-income countries, and thus It is not possible to come to more than very limited conclusions about the global evolution of the problem of loneliness. However, it is also mentioned in this review that problematic levels of loneliness exist in many of these poorer countries. The authors therefore consider it urgently necessary to systematically survey loneliness and social isolation in these countries as well, using standardised and validated measurement instruments. This should be part of general health surveillance everywhere.

It is noteworthy that loneliness is particularly common in two phases of a person's life - youth and old age. More and more people live alone in old age. In Germany, this applies to about 50% of the population aged 65 and over. In large cities, the proportion is even higher. Of these, 85% are women. One reason for this is the higher death rate among men. Increasingly, however, ageing singles (single, divorced, separated) are determining the trend towards living alone in old age. An above-average number of men are found here. In about half of all cases, older people seem to have chosen to be single (according to Spitzer 2018).

An unusual means of escaping this loneliness in old age can be found in Japan. There, the number of crimes committed by people over 65 has quadrupled in the last two decades. More than two thirds of this age group reoffend within five years. Koichi Hamai, a professor at Ryukoku University in Kyoto who has studied the phenomenon of elderly prison inmates, confirms that loneliness is the main reason for this development. He believes that a significant number of older women deliberately choose to stay in prison to escape social isolation. A 78-year-old female inmate described prison as "an oasis, with lots of people to talk to", where support and care are offered in addition to human companionship. Surely this is also an expression of Japan's ageing society. How much time before we in Europe see a similar development?

What is the situation with adolescents and young adults?   Spitzer attributes the increase in loneliness among young people to urbanisation on the one hand and the spread of social media on the other. Urbanisation leads to more anonymity and isolation. Social media does not bring people together, as is often claimed, but rather causes an increase in dissatisfaction, depression and loneliness. This has been confirmed in several studies. For example, a study published in the American Journal of Preventive Medicine (Primack & al. 2017) at the beginning of 2017 on a representative sample of 1787 young adults showed a clear connection between the experience of loneliness and the time the study participants spent in online social networks. Only 3.2 per cent of the participants did not use any social media, which further underlines the significance of the finding. In another recently published study (Twenge & al. 2021), which examined loneliness among students in nearly 40 countries, the authors found that loneliness almost doubled between 2012 and 2018, and a strong correlation was also found in this study with the amount of time young

people spent on smartphones and the Internet. Girls were more affected by this. The findings of the American study were thus confirmed. In addition, it was also shown that this is not only a US phenomenon.

Is there any valid data on the impact of the coronavirus pandemic on loneliness yet?

The rules of social distancing as well as the lockdowns during the COVID-19 pandemic changed social interaction for many and increased the risk of loneliness in the general population. There are already some interesting data on this. The aim of a multinational study (Bonsaksen & al. 2021) was to investigate loneliness and its association with social media use in different age groups during the COVID-19 pandemic. An online cross-sectional survey was conducted in Norway, the United Kingdom, the United States and Australia in April/May 2020, recruiting 3,810 participants aged 18 years or older. Surprisingly, social media use was found to be associated with lower social loneliness among the oldest participants. Less surprisingly, as might be expected from the studies mentioned above, social media use was correlated with higher emotional loneliness among the youngest participants. The correlations between social media use and loneliness appeared to vary by age. While older people's engagement in social media appeared to be a resource to reduce loneliness during the COVID-19 pandemic, levels of loneliness increased among high-frequency social media users at younger ages.

Another study by the same research team (Thygesen & al. 2022) with over 3,000 participants showed a more nuanced picture of how social media use in the pandemic affected mental health and loneliness. The survey was conducted nine months after the outbreak of the COVID-19 pandemic in Norway, the UK, the US, and Australia. Those participants who used social media with the motive of accessing entertainment and to reduce feelings of loneliness showed poorer mental health than those who used social media to maintain personal contacts and relationships. This study shows that the motivation for using social media does make a difference.

Another surprising result was shown by a German longitudinal study (Alt & al. 2021). Using data from 843 adolescents, the effects of extraversion (i.e. individuals with a more externalised attitude) on changes in loneliness and depression were investigated. The data was first collected before the 2018/2019 pandemic and then repeated after the first lockdown in 2020. The results showed that highly extravert adolescents experienced a greater increase in depression. A third of this effect was mediated by an increase in loneliness. These findings are noteworthy in that they contradict previous work describing lower levels of depression in extravert adolescents, challenging the notion of extraversion as a protective factor. Apparently, under restrictive conditions, the personality trait "extraversion" can become burdensome.

Let's get back to older people. Lena Dahlberg, a well-known Swedish researcher on ageing, states in an editorial on the topic of loneliness during the pandemic (Dahlberg, 2021) that older people in particular are often unable to use, or have no access at all to social media. Dahlberg underlines that for this reason old people are nevertheless most at risk of loneliness due to the restrictions imposed during the pandemic. Furthermore, she rightly states that virtual contacts from a distance cannot fully compensate for the loss of seeing people in person. The author therefore concludes that the

political measures with regard to the pandemic must be more individually tailored so that older people living at home are not additionally discriminated against in this way.

In summary, it can be said on the basis of the now abundant data that loneliness particularly affected both young and old people during the pandemic. The fact that the pandemic led to great psychological stress, especially for children and adolescents, was also reflected in the increased demand that colleagues in child and adolescent psychiatry experienced during the pandemic that they were far from being able to meet. Dealing with this became a great burden for many child and adolescent psychiatrists themselves. Many of them also felt alone, dealing with this problem. However, the data collected also indicate that even in such an extreme situation, a differentiated view remains necessary so that interventions to prevent loneliness and social isolation can be organised and implemented in as focused a way as possible. Hopefully, the lessons learned from the COVID-19 pandemic will make us better equipped to deal with a new, comparable challenge.

The Lonely Century - How did it come that far?

In what follows, I would like to address some of the causes currently under discussion as to why loneliness has become such a relevant problem in our society.

Mobility
Based on scientific studies, there is clear evidence that social integration and social support have declined sharply in recent decades. One important reason for this is that we move much more frequently nowadays. In the US, about 15% of the population changes residence every year (US Census Bureau & Mateyka 2015). In Europe, mobility is less than half that in the US, but the trend is clearly upwards. Moving frequently is devastating to the problem of loneliness, as geographical proximity to people we know and trust plays an important role in social support. For the US, this means that someone who has six close friends loses an average of one every year due to moving away. If I do not succeed in compensating for this loss with a new close friend, then over time I will find fewer and fewer people in my environment with whom I have a trusting relationship. This was also confirmed in a study. In 1985, people in the USA still had three trustworthy people with whom they could discuss their problems. In 2004, there were only two. A full 44% of respondents discussed their problems with no one or exclusively with one person. The number of people who could not discuss their problems with anyone tripled from 1984 to 2004 (according to Hasler 2017).

Social contagion
The importance of the geographical proximity of people who are well-known to us has already been described above. The findings from the Framingham Heart Study, which is known primarily to internists, are all the more thought-provoking. In an analysis of data from this well-known longitudinal study, which for years followed a large part of the population of the small town of Framingham in the USA with regard to their state of health, it could be shown that loneliness can also spread in social networks, i.e. a kind of social contagion occurs (Cacioppo & al. 2009). If lonely and non-integrated people live in the neighbourhood, the risk of feeling lonely oneself and experiencing a loss of social integration increases markedly. And once social integration is lost, it remains lost for quite a long time. It is to be hoped that we can live in a neighbourhood where social contacts are still an everyday occurrence.

Decline of compassion

In autumn 2016, an 82-year-old retiree collapsed unconscious in front of an ATM in a branch of a bank in the Ruhr region in Germany. Four people stepped over him one after the other, fetched money and left again - without helping. Only the fifth bank customer offered help. Such anecdotal reports illustrate what has since been proven by hard data: People's compassion is declining. A meta-analysis (Konrath & al. 2010) that included 72 studies over three decades (1979 to 2009) and pooled data from over 13,737 undergraduate students from the US showed a significant decline in the ability to be empathic and to see things from others' perspective. From 2000 onwards this decline was particularly pronounced. In the discussion of their results, the authors point to parallel trends that they see as partly responsible for this development. For example, an increasing materialistic attitude can be observed. A whole series of other studies prove that narcissistic personality traits have also strongly increased. Is it a coincidence or is it also significant that the launch of the most important websites that dominate the net today also occurred in the years after 2000?

Neoliberalism

Noreena Hertz sees another reason for the loneliness crisis of our time. She attributes responsibility to the development of neoliberalism from the 1980s onwards. This represents a very one-sided idea of freedom, based on an idealised form of self-reliance, the principle of the lean state and ruthless competitive thinking that places self-interest above community and the common good. In many countries, this led to a significantly greater disparity in income and wealth. As a result, a significant proportion of the population felt left behind, "labelled as losers, in a society that only has time for winners..." (Hertz, p. 24 in the German translation of the book). According to Hertz, neoliberalism has fundamentally changed not only economic relations but also our relations with each other. Many are under constant stress about their social status.

Loss of inner values

The results of a study by the American psychologist Jean Twenge (Twenge & al. 2010) support Hertz's thesis. Her data show that in recent decades in the USA intrinsic values such as inner independence, stable moral concepts, culturally rooted security, social belonging, close friendships, sense of community and family have been displaced by extrinsic values such as income, youthful appearance and material wealth, i.e. status symbols. Further studies show that while extrinsic motivation leads to greater activity in "acquiring" friends, and thus effectively to more new friends, relationships resulting from this motivation are superficial and tend to deteriorate in the long run (Ojanen & al. 2010). Intrinsic motivation leads to fewer new friends on average, but to a high quality of relationships that improves even more over time. The fact that the quality and not the quantity of social relationships is crucial for protection against loneliness shows the great importance of intrinsic values for our physical and mental health as well.

Why online media will not be the solution?

The internet and the World Wide Web that is based on it were and still are seen by many as the technology to avoid loneliness. Being able to be connected to everyone at all times and in all places seems to many people to be the social progress of a digital society. In particular, the use by millions of online portals such as Facebook, Twitter, Instagram or Snapchat are associated for many with the hope that feelings of loneliness will once and for all be a thing of the past.

As was already made clear in the section on the situation during the pandemic, contrary to hopes, it has been proven in several large scientific studies that the use of social media is conducive to depression and tends to increase feelings of loneliness. In a study (Kross & al. 2013) with 82 nearly 20-year-olds, the connection between the use of Facebook and the subjective state of mind was examined. Over a period of two weeks, the participants were contacted five times a day by text message at a randomly selected time in order to determine their subjective well-being at that moment and their overall life satisfaction. In addition, the participants were asked how intensively they had used Facebook since the last text message. In this very well-done study, a direct negative influence of the intensity of Facebook use on subjective well-being could be proven. A reverse influence, that limited well-being leads to more Facebook use, could not be ruled out.

Several studies have also shown that use of social media has a negative influence on the feeling of isolation. In one study published in the *American Journal of Preventive Medicine* (Primack & al. 2017) relating to a representative sample from the US of 1787 adults between 19 and 32 years old, the authors examined the link between the experience of solitude and the use of social media. This study also showed a clear link; those who use social media for more than two hours a day are twice as likely to feel lonely. Even after having eliminated all other possible factors such as income, education, age and sex, a statistically significant linke was clearly established between the use of social media and the feeling of loneliness.
Now, it is fair to say that statistical correlations say nothing about cause and effect. It could be that lonely people tend to visit online social media. But it could also be the other way round. On the one hand, people have less time for real contacts because they use online media. On the other hand, it is easy to become envious of the many people who always have more friends and likes than you do, even if not everything posted is true. However, recent scientific results now make a causal connection between the use of online media and feelings of loneliness and a deterioration in well-being likely.

In view of the many studies that demonstrate the negative influence of intensive Facebook use on mental well-being, the results of a large experiment conducted in Denmark are not really surprising (Tromholt, 2016). 1,095 participants were randomly divided into two groups. One group had to completely abstain from Facebook for one week, the other group, which served as a control group, used Facebook as usual. In the group that had a Facebook break, both mood and life satisfaction improved. In addition, it could be shown that the effect of the break was significantly greater for intensive Facebook users and for those who tend to envy others on Facebook. The author concludes by insisting that this study now provides causal evidence that intensive use of Facebook negatively affects well-being.

A second study from the USA (Hunt & al. 2018) with a similar design again showed that limiting the use of social media led to a significant improvement in mental well-being, thus confirming the causal relationship already postulated in the Danish study.

Trust is an essential pillar of satisfaction, happiness and health of the individual as well as of an economically and socially functioning society. This is emphasized again and again by the most diverse sciences. Trust arises from successful interactions between strangers. Asking for directions, buying a coffee or an ice cream are the small building blocks on which our community is based. Small encounters of this kind, which take place millions of times a day, are the breeding ground for general trust. "And this is precisely where the smartphone comes into play" emphasizes Manfred Spitzer (Spitzer, 2018, p. 138). As a result of the information processing that is always and

everywhere possible, person-to-person encounters are decreasing in number. Today's widespread online shopping, online banking and Google maps allow us to do a lot of business and to navigate without contact with people. And in place of face-to-face communication, we are chatting, texting, posting and emailing. All of this has the effect of diminishing human contact, which is important in a healthy society to experience a sense of belonging, a feeling that is crucial for building trust in a community. As shown in a large-scale study by Kushlev and Proulx (2016), there is indeed a link between smartphone use and low trust towards neighbours, strangers and people of other religions or nationalities. Surprisingly, however, this does not apply to people who inform themselves about current affairs via television, radio, newspapers or the internet. A reverse cause-effect relationship, i.e. whether someone who trusts strangers less is more likely to use their smartphone to obtain information, was able to be ruled out. Those who trust others less also feel lonelier!

All these many findings show that online media cannot be the solution to the loneliness problem of our time. Rather, it must be clearly assumed that for many users, loneliness and social isolation are exacerbated by the uncritical use of social media. However, this negative aspect of social media seems to have hardly reached the consciousness of young people and not yet to a sufficient extent that of their parents. At least for Switzerland, I have to conclude that the teaching of media literacy, which also points out these negative consequences, is rather in its infancy. In view of the devastating consequences that loneliness can have, this should be a top priority, also politically.

Last but not least

Every day we have the opportunity to turn potentially impersonal conversations into genuine social interactions. It is these kinds of micro-interactions that have value and contribute to the lubricant of society. In a funny experiment, social psychologists Gillian Sandstrom and Elisabeth Dunn (2013) from the University of British Columbia, Canada, investigated whether such micro interactions have a measurable impact on our well-being. Outside a Starbucks in a busy urban area, they recruited arriving customers for this experiment: half of the customers were instructed to be friendly and make some small talk with the barista. The other half were told to be efficient and avoid unnecessary conversation. Although the interaction lasted only 30 seconds, the random participants in the "friendly" group reported higher satisfaction scores after the exchange than the short-tempered participants. The researchers found evidence that these effects are mediated by a sense of belonging. And this confirms exactly what Spitzer pointed out, that these millions of small encounters are the breeding ground on which trust can grow in a society.

I would like to make a small observation about this, which my wife Su, who unfortunately cannot attend this conference, has experienced time and again since this spring. As a librarian, she has a commute of 45 minutes, most of which she covers by public transport. Motivated by a sermon on Romans 12, in which Paul talks about "life as worship", she changed her behaviour in such a way that she consciously seeks direct, friendly eye contact with people standing next to her at the bus stop or sitting next to her on the bus. And it is amazing how this simple change to a welcoming gesture has prompted many people to enter into conversation with Su. Most of the time it remains superficial small talk; rarely does someone pour their heart out to her. And what corresponds with the observations of Sandstrom and Dunn is that Su really does experience herself as happier when she arrives at work or at home in the evening. The small disadvantage, perhaps not so small for a librarian, that she doesn't get to read as much on the bus, is something she gladly accepts. This is an experience according to the biblical principle that Paul gave to the elders of Ephesus:

"In everything I did, I showed you that by this kind of hard work we must help the weak, remembering the words the Lord Jesus himself said: "It is more blessed to give than to receive."" (Acts 20:35, NIV).

Noreena Hertz concludes her book "The Lonely Century" with the following words:
"The antidote to this age of loneliness can in the end only be that we are there for others - no matter who those others may be. Nothing less is needed if we are to reconnect with each other in this frayed world." ((Hertz, 2020, p. 321 in the German translation of the book).

That brings us back to the beginning:
"It is not good that man should be alone." (Genesis 2:18)

With our conference theme "Solitude and Isolation in Healthcare" we are opening up a wide field and I look forward with excitement and joy to what lies ahead of us. In the past 45 minutes I have tried to set some initial landmarks and hope to have stimulated you, perhaps even excited you, so that we can enter into a fruitful dialogue. I am now looking forward to your questions and thank you for your attention.

Roland Stettler
Psychiatrist and Psychotherapist
Basel, Switzerland