# HUMOR IN THE AGE OF COVID-19 LOCKDOWN: AN EXPLORATIVE QUALITATIVE STUDY

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#### **SUMMARY**

**Background:** This study seeks to explore the use of humor during the period of isolation caused by lockdown measures imposed in Italy as a result of the Coronavirus SARS-CoV-2 pandemic.

**Subjects and method:** The study is based on a non-clinical sample. The ad hoc questionnaire measures people's readiness to search for, publish and distribute humorous material during lockdown. It investigates the intentions behind sending content via social media (WhatsApp or similar) and the emotions experienced on receiving such content.

**Results:** The responses have been analyzed quantitatively, and using Excel's IF function they have been analyzed qualitatively. In the present sample of 106 Italian respondents, searching for content was less common than publishing it (yes 44.34%, no 54.72%). Positive emotions were more frequently the motivation (total 61.32%). A high percentage sent amusing content via social media or SMS (79%). Responses demonstrating a desire to lessen the situation's negative impact or a desire for cohesion were common. Receiving material was similarly associated with positive emotions and a sense of being close to others.

**Conclusions:** humorous material appears to have served as a means of transmitting positive emotions, distancing oneself from negative events and finding cohesion.

Key words: humor - lockdown - COVID 19

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#### **INTRODUCTION**

In March 2020, the World Health Organization (WHO) announced that the Coronavirus SARS-CoV-2 outbreak had become a pandemic. This serious health emergency led governments to impose lockdown measures: "separation and restriction of movement of people who have potentially been exposed to a contagious disease, so reducing the risk of them infecting others"; measures which gave rise to negative emotions ranging from anxiety, fear and frustration, fear of contracting the disease (Brooks et al 2020), sleep disorders, hyper-vigilance, a sense of abandonment and depression particularly for residents in the "Red Zone" (Taylor et al. 2008), fear of not having adequate resources, intrusive thoughts (Conversano et al. 2020, Horesh & Brawn 2020) all the way up to post-traumatic stress disorder (Brooks et al. 2020). Although the World Health Organization (WHO; May 2020) recognized the psychological emergency arising from the physical health emergency and the evident negative link to mental health (Horesh & Brown 2020), this situation does not fit easily into the categories, and their defining criteria (Horesh & Brown 2020), specified in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association 2013). The scant studies carried out on survivors of other viruses (for example, the SARS epidemic of 2002-2004) indicate the presence of depressive symptoms and Post-Traumatic Stress Disorder (PTSD) in adults, children and health professionals in the three years following exposure to the virus (Orru et al. 2020, Wu et al. 2009, Liu et al. 2012). If devastation, worry and a sense that we cannot control events can be considered traumatic or critical, then it is entirely appropriate to include (the effects of) lockdown in these categories. Personal resources and the ability to cope are clearly important in negotiating traumatic experiences (Wu et al. 2009); can humor (in the text abbrev: h.) be a protective tool in dealing with such experiences?

#### The role of HUMOR in managing traumatic situations

If we can laugh at anything, can we even laugh in the face of a global pandemic? The fact that laughing has a positive effect in stressful or traumatic situations is confirmed by years of studies; it reduces physiological and affective arousal (Abel 2002), triggers the endocrine system, boosts endorphin levels, decreases the stress-related hormone cortisol, and enhances immunity (Martin 2001). Many studies report a reduction in anxiety in stressful situations (Lefcourt & Martin 1986, Bizi et al. 1988) although there is no overall consensus (Provine 2013). Psychological theories on laughter reference psychoanalytic, incongruity and superiority theories (Amici 2019). The first effect on perceptions of trauma we know from experience: laughter is associated with positive emotions (Martin 2001) and it acts as a distraction in times of anxiety and sadness (Rowe & Regehr 2010, Lefcourt & Martin 1986). The second effect is due to a cognitive change that enables h. to play a part in coping skills, due to its ability to resolve problems and lessen negative emotions (Pietrantoni & Dionigi 2006). Literature on the subject outlines three coping strategies (the usual manner of solving problems):

task-oriented, avoidant-oriented and emotion-oriented. Those who mainly adopt task-oriented coping strategies employ actions aimed at solving problems whereas those who adopt avoidant-oriented coping strategies avoid either the problem or the associated emotions. Those who adopt emotion-oriented coping strategies use emotional or behavioral responses to manage their emotional responses (Buchanan & Keats 2011, Endler & Parker 1994). People with a sense of humor feel less anxiety and sadness and it would seem use both taskoriented and emotion-oriented coping strategies (Endler & Parker 1994, Fry 1995). Those who use h. experience a cognitive shift enabling them to distance themselves from the cause of stress, reformulating and reevaluating their situation, thus reducing the seriousness of any anxiety and depression, and the discrepancy between expectations and reality (Boerner et al. 2017, Martin 2001) and/or "exposing" paradoxes (Forabosco 1987); reappraisal leads to a retelling of a threatening situation in more positive terms (Gelkopf & Kreitler 1996, Lazarus & Folkman 1984). Laughing "at something" permits us to distance ourselves from our personal history and experiences, it makes us aware of conflicts between reality and the ideal, it lightens the disappointment of unrealized ambition, emphasizing unusual behavior both in ourselves and in others (Boerner et al. 2017); "laughing things off" could reduce expressive inhibition, acting as a protective shield in difficult situations (Clapp et al. 2015) and activate creative thinking, an important mechanism for managing adversity (Rominger et al. 2018). Expression and appreciation of h. facilitate group cohesion in the sense of 'attraction to the group' (Mudrack 1989 cited by Romero & Pescosolido 2008) through experiencing positive emotions that act as a "social lubricant" (Kuiper et al. 1995). Laughter increases communication and reduces distance between group members, sustaining relationships (Romero & Pescosolido 2008), and reaffirming group identity emphasizing common values, problems and attitudes (Reay 2015, Weick & Westley 1996). Appreciation of h. breaks down barriers (Cann et al. 1997) with a positive effect on support networks and a consequent reduction in stress arising from negative situations (Martin 2001, Provine 2003).

Several studies identify humor as an effective coping strategy in the face of adversity because granting a sense of power over uncontrollable events reduces anxiety and depression (Yovetich et al. 1990). Boerner et al. (2017) highlight positive links between h. and well-being, and negative links between humor and Post Traumatic Stress Disorders (PTSD), anxiety and depression, such effect being repeated in the reactions to terrorist attacks of survivors and their spouses (Besser et al. 2015). Laughter has been shown to be a useful tool for survivors of the 11 September terror attacks according to Bonanno & Jost (2006); in discussing serious matters such as death (South et al. 2020), in healthcare settings (Rowe & Regehr 2010); and for war correspondents (Buchanan & Keats 2011). During lockdown in Bergamo (one of the areas in Italy most affected by Coronavirus) an increase in humorous messages relating to the dramatic situation being experienced was observed both among social groups and among the various social media. How consciously or actively was h. being used to communicate positive emotions or to share the experience? Specifically, was sending humorous content motivated by a wish for shared experience; to bring solace to others (through positive feelings); to curb one's own negative feelings; to downplay thus reducing the cognitive load of the situation? We also examined responses from those who received material. This provided the basis of the proposed qualitative exploratory study.

# SUBJECTS AND METHOD

## Measures

A brief, ad hoc qualitative questionnaire was devised, drawing upon the literature cited above (Table 1) with the objective of collecting information on the use of h. during lockdown, examining aspects relating to motive and emotions; items were formulated by reference to the semantics of the words "desire" and "will", to highlight the respondents' free will. Areas examined are as follows: active searches for humorous content, publication via social network (Facebook, Instagram etc) and reasons for publication; sending messages via social media (WhatsApp, SMS, etc) together with reasons for doing so and finally, emotions provoked by material received from third parties. The format was a multiple-response questionnaire.

## Participants

The questionnaire was posted on Facebook in order to capture diverse respondents not limited by age or interest; 108 people responded. Two of these did not give informed consent and so were excluded. Average age of respondents is 44 years, 67% are women, and 33% are men; 50% of the sample is married, and the rest are single, widowed or separated. Education levels indicate that 53.77% are university-educated, 39% completed secondary education, and about 7% completed compulsory education. Types of employment indicate that most are employees (53.77%) and 19.81% are selfemployed. The sample is representative of the population.

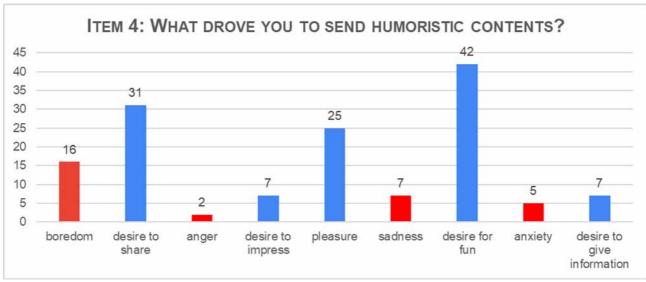
## RESULTS

Given the nature of the questionnaire (no validation nor numerical values), responses were analyzed in percentage terms, Excel's IF function was used to draw out logical comparisons, and the data was then analyzed qualitatively. The percentage of 44% of the sample actively sought out humorous content against 56% who did not; 54.7% had published content on social media whereas 45.28% had not; whether or not it had been searched for, appealing or funny content was then shared. It is interesting to note that generally, 78.3% of respondents do not publish frequently against 21.70% who state that they do: it is feasible that lockdown prompted people to increase their publication of amusing content on social networks. The percentage of 61.32% were motivated to publish on social networks by positive feelings, 18.87% by negative emotions and 34.91% did not respond to the question. It is striking that "boredom" was cited as the negative emotion felt by 15.95 % of the sample; less weight was given to anger (1.85%), sadness (6.48%) and anxiety (4.63%); 39.25% of those who responded on the positive side were driven by a "desire to amuse others" and 29% by a "desire to share", and 68% of this group cited both of these reasons; the item "for pleasure" did not provoke much response (Figure 1). The percentage of 79.25% of respondents had sent humorous content to acquaintances and friends via SMS, whereas 20.75% had not; 45% were driven to send content by positive feelings or a "desire to amuse others"; there were few who were motivated by negative feelings (8%, of which 4.72 % boredom, 5.66 % sadness) but those who specified one of these emotions also specified the other. 55.65 % were driven by a "desire to defuse", 25.47 % by the "desire to create more optimism" and

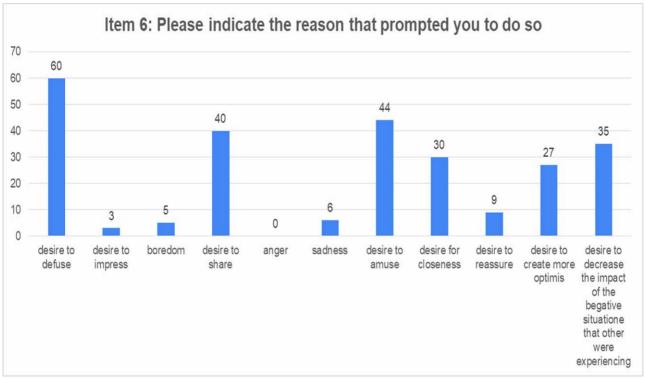
33.02% by a "desire to decrease the impact of the negative situation that others were experiencing" with the same respondents who specified one motive also specifying the other: 81% of those who indicated a "desire to instill optimism" also indicated a "desire to defuse", 65.71% stated both a "desire to defuse" and "reduce the impact of the negative situation", and 15% of the sample indicated all three. 37.74% were driven by a "desire to share", 28.30% by a "desire for closeness", 1'8.94% by a "desire to reassure". 73.34% of those who indicated a "desire for closeness" also expressed a "desire to share", which percentage rises to 100% (9 out of 9 respondents) who expressed both a "desire to reassure" and to "decrease the impact of the negative situation that others were experiencing" (Figure 2). There is no overlap between other possible answers. Finally, 97% of the sample had received humorous content via SMS or Whatsapp. On receiving such material, 88.68 % felt positive emotions; 14.15% negative emotions, and 9.43% did not respond to the question. Reception of such content stimulated "amusement" (53.77%), "pleasure" (54.72%), relief from sadness and anxiety (17.60%) with 90% indicating relief from both sadness and anxiety. On the negative side 12.26% expressed "annoyance", only 1.89% indicated "sadness" and 5.5% "boredom".

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<ul> <li>desire to decrease the impact of the negative situation that others were experiencing</li> <li>7. Did someone send you humorous content (via social media or text messages)?</li> <li>ges</li> <li>no</li> <li>8. Please indicate how this made you feel (tick as many as are applicable)</li> <li>annoyance</li> <li>anger</li> <li>relief from sadness</li> <li>pleasure</li> <li>sadness</li> <li>optimism</li> <li>boredom</li> <li>amusement</li> <li>nothing</li> </ul>	□ boredom	$\Box$ boredom $\Box$ desire to surprise				
<ul> <li>7. Did someone send you humorous content (via social media or text messages)?</li> <li>ges</li> <li>no</li> <li>8. Please indicate how this made you feel (tick as many as are applicable)</li> <li>annoyance</li> <li>anger</li> <li>relief from sadness</li> <li>pleasure</li> <li>sadness</li> <li>optimism</li> <li>boredom</li> <li>amusement</li> <li>nothing</li> </ul>		$\Box$ desire to share $\Box$ desire to instill optimism				
□ yes       □ no         8. Please indicate how this made you feel (tick as many as are applicable)         □ annoyance       □ anger         □ pleasure       □ sadness         □ boredom       □ amusement	□ desire to decrease the impact of the negative situation that others were experiencing					
8. Please indicate how this made you feel (tick as many as are applicable)         annoyance       anger         pleasure       sadness         boredom       amusement         nothing	7. Did someone send you humorous content (via social media or text messages)?					
□ annoyance□ anger□ relief from sadness□ pleasure□ sadness□ optimism□ boredom□ amusement□ nothing	$\Box$ yes	□ no				
□ pleasure □ sadness □ optimism □ boredom □ amusement □ nothing	8. Please indicate how this made you feel (tick as many as are applicable)					
□ boredom □ amusement □ nothing	•	□ anger			SS	
	□ pleasure	$\Box$ sadness	5	optimism		
	□ boredom			$\Box$ nothing	e	
$\Box$ gratitude $\Box$ relief from anxiety $\Box$ other	□ gratitude	□ relief fr	om anxiety	□ other		



**Figure 1.** Item 4. The numbers indicate the number of answers. The percentage of "POSITIVE EMOTIONS" responses is 61.32%; the percentage of "NEGATIVE EMOTIONS" in 18.87%. The 34.91% that did not answer is not shown in the graph



**Figure 2.** Item 6. The numbers indicate the number of answers. The percentage are: desire to defuse (56.60%), desire to impress (2.83%), boredom (4.72%), desire to share (37.74%), anger (0%), sadness (5.66%), desire to amuse (41.51%), desire for closeness (28.30%), desire to reassure (8.49%), desire to create more optimis (25.47%) and desire to decrease the impact of the negative situation (33.02%)

## DISCUSSION

The objective of this exploratory study is to demonstrate the way in which people have used h. during lockdown measures imposed in Italy during the health crisis caused by Covid-19. The respondents would appear to have increased their publication of humorous content, although they did not always search for it actively, suggesting that people republish what captures their attention/amuses them. The difference in the frequency of publication prior to and during lockdown suggests that people found amusing material more appealing and that positive emotions prompted them to share it. Among the negative emotions, the response which gained the highest percentage was "boredom" which encompasses dissatisfaction, restlessness and tiredness (Del Pinto 2017), emotions highlighted in studies relating to lockdown (Taylor et al. 2008, Brooks et al. 2020). The best strategy for coping with boredom is meaning-focused coping, a series of cognitive strategies which permit a positive reinterpretation of the meaning of a problematic situation (Folkman 1997 cited by Del Pinto 2017): h. can be used in meaning-focused coping.

The percentage of those sending material via Whatsapp or similar is high. Negative emotion played little part in sending such material, whereas positive emotion did; boredom was not mentioned perhaps due to the fact that unlike social networks, social media connects people directly and probably in smaller groups. As is consistent with literature on the subject, h. promotes positive emotions and social feelings, reducing loneliness (Overholser 1992), a likely emotion during lockdown. Many of the respondents appear to have sought out the moderating effect of h. "through more positive appraisals and more realistic cognitive processing of environmental information" (Kuiper & Martin 1998) making a "deliberate effort" (Abel 2002) and a "conscious effort" (Kuiper et al. 1995) leading them to take things less seriously, "minimizing" (Rim 1988). The overlap between those who viewed sending material as a way to "decrease the impact of the negative situation that others were experiencing" and to "downplay" suggests the high value placed on cognitive reevaluation of content and the need to "reassure". For 45.28% sending material seemed prompted by (a desire for) cohesiveness (Fry 1980), sharing with, staying close to and reassuring others, reducing solitude and loneliness (Romero e Pescolido 2008, Overholser 1992). The figure of 60% of participants responding equally positively in relation both to publishing on social networks and sending humorous material via social media might suggest a personal preference for this type of material. The very high percentage of people receiving content via SMS or WhatsApp indicates that during lockdown making people laugh was a way to communicate emotions and stay in touch. Receiving material triggered positive emotions and created a mental state which acted as a "social lubricant" (Romero e Pescosolido 2008, Kuiper et al. 1995), stimulating optimism and well-being (Boerner et al. 2017). The presence of "annoyance" is caused by the huge quantity of material received in relation to its quality. The response "nothing" might indicate the respondent paid little attention to material published. Marital status made no difference to responses on questions relating to sharing material. Due to disproportionality in this regard, gender was not examined; future research might consider the effect of gender on sending/publishing humorous content. High educational levels might have influenced the results, since literature on the subject shows that high education levels are associated with a greater capacity to cope and a lower probability of developing emotional disturbances (Taylor et al. 2008). No measures of the traumatic component have been inserted since the lockdown is not recognized as a traumatic event by the psychiatric nomenclature (Horesh & Brown 2020); as well as no measures on stress have been included as this measurement would not have grasped the real weight of the situation that has "noumerous characteristics that are specific to mass traumatic events" (Horesch & Brawn 2020).

# CONCLUSION

Also consistent with the literature is the fact that the responses indicate that h. transmits positive emotions, it is used to communicate cohesion and support, to help others (who receive) and to distance ourselves emotionally from pain and stress, allowing us to perceive events as less frightening and to reinterpret their significance.

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# References

- 1. Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders (DSM 5). Washington DC: America Psychiatric Publishing, 2013
- 2. Abel M: Humor, stress and coping strategies. Humor 2002; 15:365-381
- 3. Amici P: The humor in therapy: the healing power of laughter. Psychiatr Danub 2019; 31(Suppl 3):S503-508
- 4. Berger A: Humor: An Introduction. American Behavioral Scientist 1987; 30:6-15
- Besser A, Weinberg M, Zeigler-Hill V, Ataria Y & Neria Y: Humor and Trauma-Related Psychopathology Among Survivors of Terror Attacks and Their Spouses. Psychiatry 2015; 78:341-353
- 6. Bizi S, Keina G & Beit Hallaham: Humor and coping with stress under real life conditions. Personality and Individual Differences 1988; 21:931-956
- 7. Bonanno AG & Jost J: Conservative shift among highexposure survivors of the September 11th terrorist attacks. Basic and Applied Social Psychology 2006; 28:311-323
- 8. Boerner M, Stephen J & Murphy D: The association between sense of humor and trauma-related mental health outcomes: two exploratory studies. Jounal of Loss and Trauma 2017; 22:440-452
- 9. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N & Rubin GJ: The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet 2020; 395:912-920
- Buchanan M & Keats P: Coping with traumatic stress in journalism: A critical ethnographic study. International Journal of Psychology 2011; 46:127-135
- 11. Cann A, Galhoun LG & Banks JS: On the role of humor appreciation in interpersonal attraction: It's no joking matter. Humor 1997; 10:77–89
- 12. Clapp DJ, Patton S, Beck GJ: Expressive inhibition in response to stress: implications for emotional processing following trauma. Journal of Anxiety Disorder 2015; 29:109-118

- Conversano C, Marchi L, Miniati M: Psychological distress among healthcare professionals involved in the covid-19 emergency: vulnerability and resilience factors. Clinical Neuropsychiatry 2020; 17:94:96
- 14. Del Pinto V: Il rapporto tra la noia e la creatività. Piesse 2017; 3
- 15. Endler N S & Parker JDA: Assessment of multidimensional coping: Task, emotion, and avoidance strategies. Psychological Assessment 1994 6:50-60
- 16. Fry WS: Perfectionism, humor, and optimism as moderators of health outcomes and determinants of coping styles of women executives. Genetic, Social, and General Psychology Monographs 1995; 121:213-245
- 17. Forabosco G: L'esplorazione dello humor. Psicologia Contemporanea 1987; 81:52-62
- Gelkopf & Kreitler: Is humor only fun, an alternative cure or magic? The Cognitive Therapeutic Potential of Humor. J. Of Cognitive Psychotherapy 1996; 10
- 19. Gibson N & Tantam D: The best medicine? Psychotherapists' Experience of the impact of humor on the process of psychotherapy. Journal of The Society for Existential Analysis 2018
- 20. Horesh D & Brown AD: Traumatic Stress in the Age of Covid-19: A Call to Close Critical Gaps and adapt to New Realities APA-Psychologial Trauma 2020; 12:331-335
- 21. Lazarus RS & Folkman S: Stress, appraisal, and coping. New York, Springer, 1984
- 22. Lefcourt HM & Martin RA: Humor and life stress: antidote to adversity. New York; Springer, 1986
- 23. Liu X, Kakade M, Fuller CJ, Fan B, Fang Y, Kong J & Wu P: Depression after exposure to stressful events: lesson learned from the severe acute respiratory syndrome epidemic.Comprehensive Psychiatry 53; 1:15-23
- 24. Kuiper NA & Martin RA: Is sense of humor a positive personality characteristic? In W Ruch (ed.), The sense of humor: exploration of a personality characteristic (pp 158-178). 1998. Berlin
- 25. Kuiper NA, McKenzie SD & Belanger KA: Cognitive appraisals and individual differens in sense of humor: Motivational and affective implications. Personality and Individual Differences 1995; 19:359–72
- Martin R: Humor, laughter, and physical health: Methodological issues and research findings. Psychological Bulletin 2001; 4:504-519
- 27. Marziali E, Mc Donald L, Donahue P: The role of coping humor in the physical and mental health of older adults. Aging & Mental Health 2008; 12

- Pietrantoni L & Dionigi A: "Quando ridere fa male": la relazione tra eventi di vita, stili umoristici e disagio psicologico. Psicoterapia Cognitiva e Comportamentale 2006; 12:301-315
- 29. Provine R: Ridere. Un'indagine scientifica. Baldini Castoldi Dalai Editore, 2003
- Orru G, Ciacchini R, Gemignani A & Conversano C: Psychological intervention measures during the Covid-19 Pandemic. Clinical Neuropsychiatry 2020; 17:76-79
- 31. Overholser JC: Sense of humor when coping with life stress. Person Individ Diff 1992; 779-804
- 32. Reay M: Using "Wild" laughter to explore the social sources of humor. Social Forces 2015; 93:1241-1265
- *33. Rim Y: Sense of humor and coping styles. Personality and Individual Differences 1988; 323-326*
- 34. Romero E & Pescosolido A: Humor and group effectiveness. Human Relations 2008; 61:395-418
- 35. Rominger C, Papousek I, Weiss E, Schulter G & Perchtold C: Creative thinking in an emotional context: specific relevance of executive control of emotion-laden representations in the inventiveness in generating alternative appraisals of negative events. Creativity Research Journal 2018; 30:256-265
- 36. Rowe A & Regehr C: Whatever Gets You Through Today: An Examination of Cynical Humor Among Emergency Service Professionals. Journal of Loss And Trauma 2010; 15:448-464
- 37. South AL, Elton J & Lietzenmayer M: Communicating death with humor: Humor types and functions in death over dinner conversations. Death Studies, 2020
- 38. Taylor MR, Agho KE, Steven JG & Raphael B: Factors influencing psychological distress during a disease epidemic: Data from Australia's first outbreak of equine influenza. BMC Public Health 2008; 8:347
- 39. Yovetich N, Dale A, Hudak M: Benefits of humor in reduction of threat-induced anxiety. Psychological Reports 1990; 66:51-58
- 40. Weick K & Westley F: Organizational learning: Affirming an oxymoron. In S. Clegg, C. Hardy & W. Nord (Eds), Handbook of organizational studies. Thousand Oaks, CA: SAGE, 1996, pp. 440–58
- 41. World Health Organization: Assemblea Mondiale della Sanità, editorial Dr. Tedros Adhanom Ghebreyesus
- 42. Wu P, et al: The psychological impact of the SARS epidemic on hospital employees in China: exposure, risk perception and altruistic acceptance of risk. The Canadian Journal of Psychiatry 2009; 54:302-311

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