



Influence of equine facilitated psychological support on the psychological wellbeing of healthcare workers during the initial phase of the COVID-19 pandemic in Italy

Authors

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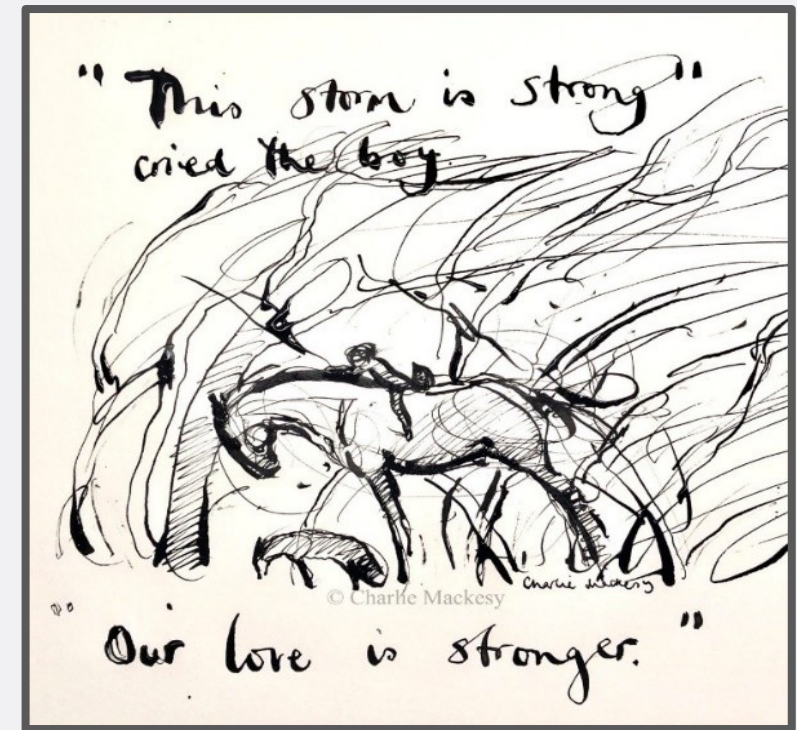
The spreading of SARS-CoV-2 pandemic triggered an unprecedented health and humanitarian emergency.

In 2020, at the beginning of the pandemic, the **Niguarda Hospital** was directly involved in the management of the emergency and provided:

- medical care to Covid-19 patients
- support programs for healthcare workers (HCWs)

Project: Equine-assisted psychological support for health care workers (HCWs)

- ✓ How was it born
- ✓ How was it organised
- ✓ How many HCWs were involved
- ✓ How many HCWs participated in the program



Charlie Mackesy



Theoretical Framework: Psychodynamic approach

Focus on the relationship

Importance of a well-kept setting and environment

The meeting as a protected transitional Space where to test oneself (D Winnicott)

Neuroscience:

Mirror neurons and empathy (Ferrari, Rizzolatti; 2015)

WIDE Literature: equine facilitated interventions:

underlines the beneficial effects of the horse intervention in the context of depressive, post trauma and emotional dysregulation.



Ospedale Niguarda

Sistema Socio Sanitario



Regione
Lombardia



Project aims:

To offer positive experiences with animals, in a natural context.

The interaction with horses is rich in meaningful affective aspects and it may increase the energies and emotional resources required to face the pandemic crisis.

Location

The Vittorio di Capua Equestrian Therapy Center (1981)

Center of excellence

Sistema Socio Sanitario





Team involved in the project:

1 Psychotherapist

4 Equine assistants

7 Horses

Participants:

Total: 96

60 Nurses

16 Doctors

13 Health and Social Care workers

7 Radiology technicians





5 Proposed meetings:

- 1 Free choice of the horse
- 2 Giving the horse a chance to enjoy some grazing time
- 3 Taking care of the animal by brushing and cleaning activities
- 4 Experiencing the relationship with the horse in liberty work
- 5 Experiencing riding bareback

At the end of the program, all the participants were asked to return an anonymous self-report questionnaire about their experience of the project.

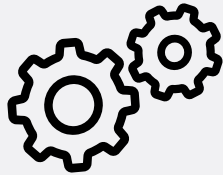


The Research Study



AIMS

- To evaluate the psychological well-being of health care workers (HCWs)
- To study the efficacy of interventions facilitated by equines compared to other types of support interventions or no interventions.



Research Design

Cross sectional study

Methods



Setting and Timing

Niguarda Hospital (Milan, Italy)

May 2020

Participants and Inclusion Criteria

175 HCWs who signed written informed consent

Aged ≥ 18 and fluent in Italian

+ self report questionnaires



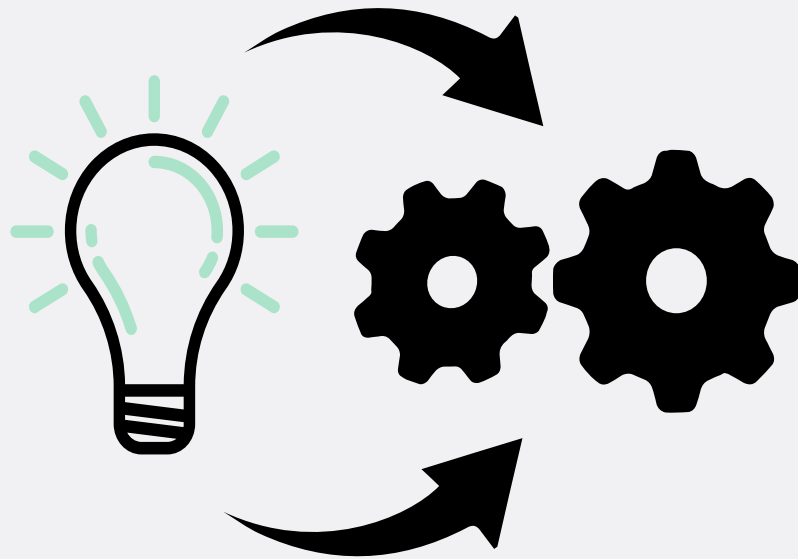
Variables and Scales ($\alpha > 0.70$)

- Demographic and workplace data
- Type of intervention vs. no intervention
- Symptoms of anxiety - Generalized Anxiety Disorder Scale (**GAD-7**)¹
- Symptoms of depression - Patient Health Questionnaire (**PHQ-9**)²
- Perceived stress - Perceived Stress Scale (**PSS**)³
- Professional quality of life - Professional Quality of Life Scale (**ProQOL**)⁴
- Post traumatic growth - Post Traumatic Growth Inventory (**PTGI**)⁵



Statistical Analysis

Statistical Package for Social Science (SPSS), Version 25.



DESCRIPTIVE STATISTICS

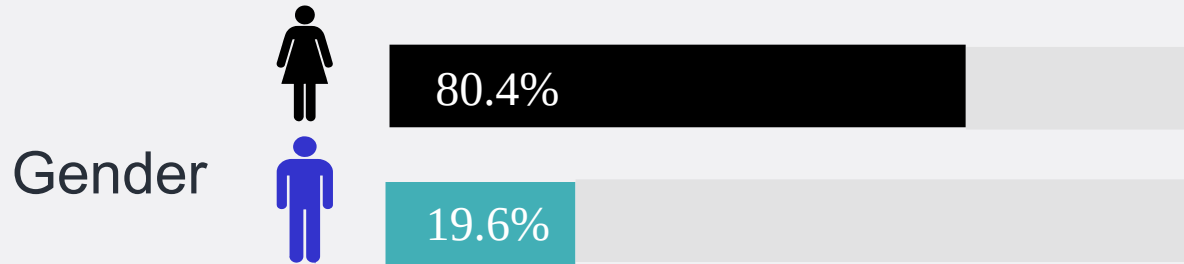
Frequencies, mean and SD to study socio-demographic and wellbeing data in accordance to the clinical cut off of Generalized Anxiety ad Depression Severity Scale.

MULTIVARIATE ANALYSIS OF VARIANCE (MANOVA)

Anxiety, depression, perceived stress, perceived quality of life and post traumatic growth were included as dependent variables to study the psychological outcomes of equine facilitated psychological support vs. other types of interventions vs. no intervention with respect to the psychological outcomes described.



Sample and Results



Age

M = 41.70
SD = 11.78
Range 23-66 years old

Type of Job

Doctor	21.3%
Nurse	63.2%
Health care assistant	15.5%

Support intervention

Intervention facilitated by equines	30.9%
Other type	36.0%
No intervention	33.1%

Psychological Wellbeing

	Anxiety (GAD-7) General Anxiety Disorder Scale	Depression (PHQ-9) Patient Health Questionnaire
Minimal to Mild	63.4%	68.6%
Moderate to Severe Symptoms	36.6%	31.4%



Results – MANOVA analysis

- Significant effect ($p < 0.05$) of the support interventions on psychological outcomes of HCWs $F(7, 163) = 2,360$; $p = 0.025$.
- **Univariate F-tests** - Significant effect ($p < 0.05$) of on post traumatic growth $F(2, 168) = 6,149$; $p = 0.003$

POST HOC ANALYSIS (Bonferroni correction) emerged that for **HCWs who participated at the equine facilitated intervention there was significantly greater post-traumatic growth (PTGI) compared to those who didn't participate in any intervention.**

GROUP	N	Mean score on PTGI	SD
Intervention facilitated by equines group	53	43.19	23.82
No intervention group	57	27.95	20.93




Conclusions

- Next step of the research: to analyze the perceived-quality questionnaire data
- The project was very appreciated, many HCWs came back to see “their horse”. Many requests were also received after the project had been ended
- Strong and constant enthusiasm in participating in the project.



- To take care of the animal without being afraid of the contact had risen a deep knowledge linked to the pressure felt in the emergency period and a new desire to get back into touch with the patient
- The horse has often revitalised the involved person, offering positive and rewarding experiences.
- Main reference: to have found new emotional and physical energies born thanks to the special relationship with this special animal

IL CAVALLO NEL 



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