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The impact of patient's suicide on health care professionals

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ABSTRACT: In international literature review, inpatient suicide is recognized as a risk for health care professionals in general, with the particularity of those who work on a mental health hospital have this probability much increased. In mental health facilities, design has significant implications on how health care professionals provide care and how patients respond to treatment. For this study, the main objectives are evaluate the impact of a patient's suicide on health care professionals, check for a connection between suicide behaviors and infrastructures and to present improvement measures for the infrastructures in order to decrease suicide attempts. Through the work developed, it was possible to see how much the health care professionals are affected by a patient's death and evaluation of the infrastructure was able to present improvement measures so that professionals can have a better workplace and decrease suicide attempts.

1 INTRODUCTION

Among other international realities, mental health represents an emerging area for its complexity of areas of intervention and for its patients which sometimes become a danger to themselves and others around them due to they're psychiatric condition, being mandatory the designing of a safe therapeutic environment (Morgan, 2009).

According to Shepley and Pasha (2013), the design of a psychiatric hospital affects how services are provide and its efficiency, being crucial on the patient treatment. This design has implications on patient's beliefs, expectation and perception of himself as well as the health care professional who works in the same place because they have different ways to see and interact with the patient's.

Serranheira, Uva, and Sousa (2010) defend that healthy health care professional, working in places conceived to grant their own health and safety are much worthier to the health care organizations, particularly in hospitals, increasing the quality of health services provided.

Workplaces should be conceived with an ergonomic view, respecting some basics aspects such as adaptation to the physical space as much as on the organizational as on the technologies matter, adapted to physiological needs and own limitations; the health care professional should not be exposed to any risks at their workplace, avoiding physical and mental exhaustion that may lead to accidents (Serranheira et al., 2010).

The term "hospital ergonomics" was introduced in literature by Serranheira et al. (2010) and the comprehension of work in health care system where health care professionals interact with patients and their families is the major concern, contributing on designing or re-designing the workplace.

Most of psychiatrists and psychologists agrees that physical environment is the basis of a successful patient's treatment, encouraging an appropriate behavior. Physical environment can also lead to decrease suicide attempts or suicides, improving the environment for the patients as the professionals (Shepley & Pasha, 2013).

Suicide is considered matter of public health and it's defined by World Health Organization (WHO) as the act of deliberately killing oneself.[1] Each one of these acts are considered tragic, affecting as much the families of the victim as the community where she belongs. According to WHO reports, every year about 800 000–one person every 40 seconds—commit suicide, all around the globe (WHO, 2014)

International literature recognizes the patient's suicide as a risk for health care professionals in general, increased on mental health facilities, including psychiatrists and mental health nurses (Rothes, Henriques, & Correia, 2013).

Health professionals who work on a daily basis with psychiatric patients have higher risk of finding patient's trying to commit suicide. Previous studies show how health care professionals are not immune of feelings while working and relating with patient's and major emotional impact is experienced when a patient's commit suicide (Takahashi et al., 2011).

[1] http://www.who.int/topics/suicide/en/ (access in 14/06/2015).

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The main objective of this article is to establish a connection between the impact of suicide on health care professionals and infrastructures. Following this connection and as a consequence, any action of prevention or improvement, infrastructures can be improved so health care professional have better work conditions and also patient's will be more safe (Serranheira, Uva, Sousa, & Leite, 2009).

2 METHODOLOGY

To evaluate impact of patient's suicide a survey questionnaire was distributed among health care professionals of a mental health hospital, for a period of three months. The hospital was chosen for being the psychiatric hospital of reference and for having protocols with the college, giving more access to data and visits.

The choice of de questionnaire was based on a systematic review of previous studies such as Takahashi et al. (2011), Rothes et al. (2013) or Wurst et al. (2013). All of them worked the impact of patient's suicide and it was applied to health care professionals.

For this study the questionnaire chosen was presented by Rothes et al. (2013) named Questionnaire of Patient's Suicide Impact, originally "QISP". The questionnaire was already published, validated and originally applied to Portuguese hospitals and health care professionals, being adapted for the sample chosen for this study.

The sample of this study was defined by professional group (psychiatrists, nurses, and operational assistants), age and years of work experience.

The questionnaire is divided in three parts, first a sociodemographic and professional characterization of the population, including, gender, age, professional group, years of experience and specific training in preventing suicides. The second part tries to relate previous experiences of the professionals with suicide both on personal life and clinical practice. At last, the third part requires if the professional has already had a patient who committed suicide, to describe how it happened, how it felt and what strategies were used to overcome the tragic situation (Rothes et al., 2013).

The data retrieved from the survey questionnaire were analyzed by Microsoft Excel 2013, using the original code from the questionnaire to guarantee the integrity of the analysis.

3 RESULTS AND DISCUSSION

3.1 *Results*

Among the three months delivering 123 questionnaires, 105 were retrieved completely answered by health care professionals. Overall each person responded to an average of 29 questions and 95.4% of the population responded correctly.

Due to questionnaire's division in three distinct parts, the analysis of the data will be respecting that order. In the first part, as seen on Table 1, 25.7% of the professionals are males and 74.3% are females. The age of the professionals suffers a variation from 20 to 64 years old, with an average age of health care professionals of 39.9 years old.

Most of the answers to the questionnaire belong to nurses, with 56.2% of the total population and doctors with 22.9%. Also two psychologists and two occupational therapists answered the questionnaire, representing 3.8% of the population.

Other characteristic of the population was the years of work experience. Through the answers professional health works have years of experience between 0 (meaning have less than a year of experience) and 40 years and an average of 15.1 years.

Each professional were asked to respond about his own capacity to deal with suicide behaviors. On Table 2, when asked if their ability to monitor patients were sufficient or not, 80.0% of the professionals believe they have that ability.

When asked if they have the capacity to identify patients with suicidal behaviors, 82.0% says they have that ability. When it comes to specific training in suicidology, 81.0% responds they don't have any, only 17.1% has specific training in this area.

Table 1. Sociodemographic characterization.

	N	%
Gender (N = 105)		
Male	27	25.7%
Female	78	74.3%
Age (N = 105) variation 20–64 years Av. – 39.9 SD – 11.2		
<23	1	1.0%
23–30	31	29.5%
31–40	24	22.9%
41–50	30	28.6%
51–60	15	14.3%
>60	4	3.8%
Professional Category (N = 105)		
Nurses	59	56.2%
Operational Assistants	18	17.1%
Doctors	24	22.9%
Psychologists	2	1.9%
Occupational Therapist	2	1.9%
Years of Experience (N = 105) variation 0–40 years Av. – 15.1 SD – 10.7		
0–10	48	45.7%
11–20	23	21.9%
21–30	23	21.9%
>31	11	10.5%

Table 2. Specific training in suicide.

	N	%
Ability to monitor patients with suicidal behavior (N = 105)		
Sufficient	84	80,0%
Insufficient	21	20,0%
Ability to identify suicidal behavior (N = 105)		
Yes	87	82,9%
No	16	15,2%
NR	2	1,9%
Specific training in suicidology (N = 105)		
Yes	18	17,1%
No	85	81,0%
NR	2	1,9%

Table 3. Previous contact with suicide behaviors.

	N	%
Personal experience (N = 105)		
Suicide attempts	15	14.3%
Suicide	16	15.2%
Clinical practice (N = 105)		
Suicide attempts	71	67.6%
Suicide	33	31.4%
N.º Suicides variation 1–3 cases Av – 1.3 SD – 0.6		
Years since last case variation 0–34 years M – 6.6 SD – 8.9		
<1	4	12.1%
1–4	16	48.5%
>4	10	30.3%
NR	3	9,1%

Table 4. Description of suicide case.

	N	%
Years since last case variation 0–34 years Av. – 7.2 SD – 9.0		
<1	4	12.1%
1–4	15	45.5%
>4	12	36.4%
Patients gender		
Male	20	60.6%
Female	12	36.4%
Patients age variation 19–80 Av. 44.6 SD 15.5		
<23	4	12.1%
23–30	1	3.0%
31–40	8	24.2%
41–50	10	30.3%
51–60	4	12.1%
>60	5	15.2%
Suicide method		
Hanging	14	42.4%
Drowning	6	18.2%
Precipitation	4	12.1%
Psychiatric diagnosis		
Depression	7	29.2%
Schizophrenia	5	20.8%
Psychosis	4	16.7%

On the second part of the questionnaire, professionals were asked about previous experiences with suicide attempts or suicides on their personal life and clinical practice.

About personal experience, as seen on Table 3, 14.3% of the professionals had previous experiences with suicide attempts between friends or family against 85.7% who never had a case in the family. When it comes to suicides, 15.2% already experienced this tragic event in their personal life, while 83.8% don't have knowledge of any suicide in the family or friends.

Health care professionals working on a mental health facilities deal much more frequently with patients with suicide behaviors (Takahashi et al., 2011). From all the responses, 67.6% of the professionals already seen a patient's suicide attempt and 34.4% have dealt with a patients suicide. The variation of case described by the professionals goes from 1 to 3 suicide cases, an average of 1.3 suicide per person. This cases, in average, took place 6.6 years ago

Analyzing the professionals who experienced at least one suicide through their career, 24.2% are male health care professionals and 75.8% are females. The average ages of the professionals is 42 years old and 18 years of work experience. About the professional category, 51.5% are nurses, 18.2% are doctors, 18.2% are Operational Assistant and 12.1% other professionals.

The described cases took place, in average, 7.2 years ago and most of the victims of suicide 60.6% were males and 36.4% females. The age of the victims is, in average, 44.6 years old, as described on Table 4.

The most common method to practice suicide is hanging with 42.4% of the cases, followed by drowning 18.2% and precipitation 12.1% of the cases.

The patient diagnosis in 72.7% of the described cases was known and there are several more common among the answers retrieved, such as depression with 29.2% of the cases, schizophrenia (20.8%) and psychosis (16.7%).

Most of the professionals, when asked if the suicide was predictable, 81.9% don't find it predictable. Suicides can also be preventable, and 30.3% of the population don't find suicides preventable.

Health care professionals have different ways to have knowledge of how the patient committed suicide, 33.3% of the case, the professional knew through family members, 27.3% heard about the case through work colleagues and 21.2% found the patient after he committed suicide.

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Table 5. Feelings towards patient's suicide.

	N	%
Feelings towards patient's suicide		
Emotional Suffering	8	24,2%
Frustration and other negative emotions	6	18,2%
Impotence and incapacity	4	12,1%
Guilt	3	9,1%
Insecurities	3	9,1%

Table 6. Data from the hospital study.

2009	2010	2011	2012	2013	2014
Suicide attempts					
3	4	4	8	9	9
Defenestration					
–	–	–	–	1	1
Suicide					
–	–	–	–	–	1
Total incidents					
695	956	787	823	928	859

After the health care professional found about de suicide, they were asked of how they felt towards patient's suicide, Table 5.

Most of professionals referred they gone through emotional suffering, feeling sad and angry with themselves, 24.2%. Frustration was the second emotion most felt by the professionals with 18.2% of the answers. Other emotions such as impotence and incapacity (12.1%) and guilt (9.1%) were also referred.

According to following answers, 27.3% of the health care professionals referred these feelings lasted between one week and one month. 21.2% lasted less than a week and 12.1% reveals those emotions lasted over six months.

These suicides also brought impact on the professional's clinical practice as 48.5% said. From this changes the most common are increase of surveillance (34.9%), review standard procedures (22.2%) and insecurities and anxiety (11.1%). Some of the professionals also referred they experienced changes in their personal lives, 21.2%. These changes consist in humor changes, 42.9% and physiological changes, mostly related with sleeping cycle (14.3%).

To deal with this event in their professional and personal lives, health care professionals were asked about strategies they used to overcome the situation.

The professionals most used resources was to talk with another work colleagues (30.8%), talk with the supervisor (11.5%) and talk with family and friends (23.1%). Less useful, professionals found the resource to psychotherapist or psychologist (7.7%) and to maintain contact with the victim's family (11.5%).

3.2 *Discussion*

In a much specific perspective, the data retrieved from the hospital which the questionnaire was delivered, shows suicide attempts and suicides have been increasing through the years, Table 6. This data shows how much accidents with patients have been increasing through the years, meaning there's much more accidents that health care professionals have to deal with.

After a careful analysis of the data retrieved from the questionnaire, was possible to reach to a few conclusions about the impact of suicide on health care professionals.

Most of the answers gathered in this questionnaire, were from females, who are in bigger number in every professional group represented by the sample.

The results in this hospital shows a number of health professionals, with their average age of 39.9 years and the years of work experience is 15.1 average.

According to Wurst et al. (2013) there is no specific connection between years of work experience and suicide cases professionals had to deal with. This questionnaire shows that the average years of experience of a professional who had contact with a suicides patient is 18 years and the last case about 6.6 years ago, meaning the professionals who answered this survey experienced this in earlier stage of the career.

Some of the patients who entry at the hospital already have suicidal ideation, being the reason that lead them there. Other patients start to develop suicide behaviors through the stay in the hospital. In this specific case it is necessary to evaluate the risks to guide the patient treatment (Hunt & Sine, 2015).

When it comes to infrastructures, it is possible to realize most of the patients committed suicide by hanging (42%) and while visiting the hospital, health care professionals revealed their concerns about how patients easily use doors, windows, bed headers and sheets to achieve the suicide.

This should be object of change so that patients won't be able to tie a sheet or a piece of cloths to try self-harm and according to Hunt and Sine (2015) there are key point in a room's conception such as doors, windows, beds and bathrooms. These changes should start by reorganizing physical spaces, and increasing surveillance of the rooms and common spaces (DVA, 2010).

These changes are also important for the professional's well-being. If the spaces are more safe

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for patients and avoid them to commit suicide, then health care professionals are also safe from having to watch a patient who tried or committed suicide (Draper, Kõlves, De Leo, & Snowdon, 2014).

Several authors (Brickell et al., 2009; Hunt & Sine, 2015; Shepley & Pasha, 2013; Taylor, 2014) refer the complexity of the theme and it doesn't allow to have one solution for every problem found in mental health facilities. Patient's unique psychiatric condition makes them much more vulnerable and unpredictable when it comes to suicide behaviors. There's always room for improvement and each hospital should asses their risks and try to find solutions adapted to their reality's in a way to improve the services provide by health care professionals as patient's own safety.

4 CONCLUSION

Suicide prevention requires dedication and cooperation of multidisciplinary team, in clinical practice, as well in the society the victim is inserted so that together the stigma of suicide can be decreased (WHO, 2014).

International literature about the impact of patient's suicide is short and there is a lack of studies in this same area. Also the literature about hospitals design and ergonomics is rare, but there are a few manuals written to guide the conception of a mental health facilities. Specifically in Portugal, the theme is much underappreciated and the only guidelines are few and generalist.

Through this work is possible to see the impact of inpatient suicide, it affects every professional who had to deal with this event. Most of the professionals referred they had negative feeling about the suicide of the patient and that brought changes to their clinical practice, and sometimes to their personal lives, for long periods of time.

According to the data from the questionnaire, the most common way to practice suicide is by hanging so, one way to start decreasing the impact of patient's suicide is to change infrastructures so that patients find much difficult to even try to practice suicide. The beds and windows should be re-designed so it wouldn't be so easy to patients to try and practice suicide by hanging (DVA, 2010).

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