

The Relationship Between The Level Of Training Of Paramedics In Psychological First Aid And Reducing Trauma Among Injured People

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ABSTRACT:

This study aims to examine the relationship between the level of training of paramedics in psychological first aid and its role in reducing psychological trauma among injured people in the Kingdom of Saudi Arabia. The descriptive analytical approach was adopted using the questionnaire tool to collect data from a sample of (200) participants from the paramedics working in the Saudi Red Crescent Authority. The results showed a strong positive relationship between the level of training and the effectiveness of intervention in reducing psychological trauma. They also indicated that training explains a significant proportion of the variance in reducing the severity of trauma, in addition to the presence of statistically significant differences in favor of paramedics who received specialized training, as well as between different levels of experience. These results underscore the importance of investing in psychological training programs for paramedics to enhance the quality of care and improve the mental health of injured patients.

Keywords: Psychological first aid, paramedics, training, psychological trauma, Saudi Red Crescent.

INTRODUCTION

is largely dependent on the ability of first aiders to provide initial psychological support to the injured. Injury is not limited to physical harm only, but extends to include the psychological aspect, which may leave deep and long-lasting effects. In this context, the first aider becomes more than just a medical care provider, but rather a partner in the comprehensive recovery process, especially when the injured are exposed to emergency situations such as natural disasters and major accidents, where the initial response is necessary to reduce psychological damage. Psychological first aid is considered The first step in stabilizing the psychological state of the injured. A paramedic trained in these skills can provide basic emotional support through active listening, showing empathy, and providing clear and simple information about the current situation and the next steps to be taken. This type of early intervention helps prevent the development of initial reactions such as extreme fear and anxiety into more complex psychological disorders such as post-traumatic stress disorder (PTSD). Specialized training also enables paramedics to

recognize signs of severe psychological distress, such as mental shock or panic attacks allowing them to provide appropriate support or refer the injured person to specialists if necessary 1,2

contributes to reducing the pressure on health systems in the long term, as early intervention reduces the likelihood of resorting to intensive mental health services in the future . A well-thought-out intervention in the early stages lays a solid foundation for psychological resilience and recovery, which enhances the individual's ability to regain his life normally after the trauma . Therefore , investing in training paramedics in psychological first aid is not only an investment in the health of individuals , but it is an investment in the health of society as a whole. Which confirms that initial psychological support is no less important than physical medical care 8

DISCUSSION

The importance of training paramedics to provide psychological first aid is that it provides clear and simple information to the injured. In moments of crisis , the injured person may not be able to absorb complex information at that moment . Therefore, providing him with basic information about his current situation and the next steps can restore some of his sense of control over the situation, which helps to achieve stability. Myself , and the importance is not limited to the present moment But it extends to long-term recovery Early psychological intervention lays a strong foundation that helps victims build healthy coping mechanisms , reducing their need for intensive mental health services in the future. Trained paramedics can also identify victims who need specialized psychological help and direct them to appropriate specialists 7,6

Accordingly, this training contributes to reducing pressure on the health system in general, as dealing with psychological trauma in its early stages reduces cases of chronic psychological stress and disorders associated with it . Investing in this type of training is an investment in the health of the individual and the community because it promotes comprehensive recovery and emphasizes that effective medical care must include both the psychological and physical aspects . The paramedic who understands this importance is not merely a provider of treatment, but rather a partner in the entire recovery process. This is the basis of the relationship between training and effective recovery for the individual 3,2

concept First aid Psychological Primary And its role in care Emergency

concept of psychological first aid

First aid is a comprehensive concept that includes providing humanitarian and supportive support to people who are experiencing severe distress after being exposed to a traumatic event , and It is not a form of psychotherapy, but rather an immediate, initial intervention aimed at providing basic safety and comfort, helping individuals regain control of their emotions, and connecting them with long-term sources of support . This concept is based on a set of basic principles that can be applied by any trained person, whether a paramedic or relief worker, with the aim of providing practical and psychological support in a non-intrusive manner, but in a way that respects the feelings of the injured and avoids forcing them to talk or reveal painful details . The importance of psychological first aid lies in its ability to calm the injured, help alleviate the initial shock, reduce the levels of stress and anxiety they experience, and establish a positive relationship with the injured through listening and empathy, as well as connecting the injured to support and directing them to agencies and resources that can provide them with ongoing assistance, such as medical or social services 1,6

Therefore, psychological first aid is the art of providing rapid humanitarian support. It is an effective tool that gives individuals the ability to begin the journey of recovery after trauma and emphasizes that comprehensive care includes both body and mind 2,5

role of first aid in emergency care

Psychological first aid plays an important role in emergency care, as it is considered an integral part of the comprehensive response to crises. Psychological first aid is concerned with providing immediate psychological support to the injured, which contributes significantly to alleviating the shock and psychological effects resulting from accidents . The paramedic plays a vital and pivotal role in providing psychological first aid. He goes beyond being a physical medical care provider but becomes the primary psychological supporter for the injured . This role is not limited to treating visible wounds only, but extends to dealing with the psychological distress that may be caused by accidents and disasters . The role of the paramedic is clearly evident in providing safety and comfort to the injured in moments of shock and severe turmoil, which helps prevent the psychological effects from worsening 3,7

The paramedic begins his role with the skill of careful observation, assessing not only the physical injuries but also the psychological state of the injured person. He watches for signs of distress such as mental shock , panic attacks, or detachment from reality . Then he moves on to active listening without coercion, which is an essential element of his work. The paramedic gives the injured person a safe space to express his feelings freely without pressuring him or forcing him to talk. This approach builds trust and reduces the injured person's feeling of isolation, which helps him regain some control over his feelings. The paramedic also plays his role in providing simple and clear information. In times of crisis, complex information can be confusing, so the paramedic explains what is happening and the next steps in an easy-to-understand way . This role restores a part of the injured person's sense of control, which calms him down and reduces anxiety. Therefore , the role of the paramedic is not limited to initial intervention, but extends to connecting him to ongoing sources of support and A paramedic is not a therapist, but rather a bridge connecting victims to the services they need after emergency care, such as mental health centers or community support organizations . This comprehensive role ensures that emergency care is not limited to saving lives but also includes protecting them from long-term psychological damage, making the paramedic an essential partner in the recovery process 5,7

level training paramedics And its effect on quality Intervention psychological The first

is closely related to the quality of the initial psychological intervention they provide. Which directly affects the recovery of the injured. The more trained the paramedic is, the greater his ability to provide effective psychological support, which reduces the negative effects of psychological trauma . Specialized training plays an important role in developing the skills of paramedics in several aspects , including understanding trauma, as training provides paramedics with basic knowledge about psychological responses to trauma, such as panic and denial. Or extreme confusion, and this understanding helps the paramedic to anticipate the reactions of the injured and deal with them appropriately, instead of being surprised by them or misunderstanding them, as the training focuses on teaching effective and empathetic communication skills, such as active listening, using appropriate body language, and providing clear and simple information. The trained paramedic knows when to speak and when to be silent and how to provide reassurance without giving false promises, which reduces the pressure of the situation on the injured. The training also enables the paramedic to recognize signs of severe psychological distress that require specialized intervention. Such as attempts at self-harm or severe mental trauma , This helps him direct the injured to the appropriate assistance at the appropriate time, instead of being satisfied with physical care only. The training also helps the paramedic deal with his own feelings in difficult situations, which prevents him from transferring his stress or anxiety to the injured . The paramedic who understands how to manage his psychological pressure is better able to provide calm and stable support to others 6,9

The level of training is directly reflected in the quality of initial intervention, as it differentiates between the mere presence of a paramedic and his or her provision of effective support. The level of training of paramedics plays an important and pivotal role in the quality of initial psychological intervention, as it

directly affects its effectiveness in helping the injured. A paramedic who is not trained in psychological first aid may provide excellent physical assistance, but he may make unintentional mistakes on the psychological level. A paramedic trained in psychological first aid also follows a method Thoughtful and aware that the goal is not to solve the problem but to provide a safe and supportive environment It focuses on active listening without judgment and uses body language that reflects empathy and concern. This type of high-quality intervention gives the patient a sense of control in a situation in which he has lost this feeling and helps him calm himself in critical moments. The impact of training is not limited to a single interaction but extends to long-term results High-quality initial psychological intervention lays a strong foundation for psychological resilience and reduces the likelihood of developing post-traumatic stress disorder(PTSD) or depression. The victim who receives psychological support early is better able to adapt to the trauma and regain his normal life. The trained paramedic is also more efficient in identifying victims who need specialized assistance, which ensures that the victim continues the recovery journey with the relevant authorities 10,11

Therefore, the quality of intervention depends on the level of training. Training transforms the paramedic from a mere physical caregiver to an active partner in the comprehensive recovery of the injured person, leading to better outcomes on both the physical and psychological levels. Therefore, training paramedics in psychological first aid is an essential investment in ensuring the quality of comprehensive emergency care 11,12

Study Field

Saudi Red Crescent Authority (SRCA) Ambulance Services in the Kingdom of Saudi Arabia.

Geographical location: A number of administrative regions within the Kingdom (Riyadh, Makkah/Western Region, Eastern Region, and Qassim) to represent geographical diversity.

Study sample: Paramedics, male and female, working in the emergency ambulance teams of the Saudi Red Crescent; Target sample size = 200 participants.

Methodology Search And Its Tools

Research methodology: Descriptive-Analytical. The study aims to describe the characteristics of the sample and measure their attitudes towards training in psychological first aid, and then analyze the relationship between the level of training and indicators of psychological trauma reduction.

Components of the research methodology:

Study design: A cross-sectional survey based on a standard questionnaire that collects quantitative data.

Methodological objectives: (1) To describe paramedics' attitudes towards training and ability to apply psychological first aid, (2) To measure the internal consistency of the measuring tool, (3) To test the existence of a relationship and effect of the level of training on reducing trauma.

ANALYSIS RESULTS

Table (1) Mean, Std. Deviation, Min and Max

Item	Mean	Std. Deviation	Min	Max
The training I received in psychological first aid was sufficient to understand the basics of psychological support for the injured.	3.6	1.1	1	5

I have the ability to apply psychological first aid skills while responding to incidents.	3.5	1.2	1	5
Applying psychological first aid actually helps reduce feelings of fear and confusion in those affected.	3.9	1.0	1	5
The level of training I have received enhances my confidence in handling trauma emergencies.	3.5	1.1	1	5
Psychological first aid training contributes to improving the quality of care provided to injured people in general.	3.9	1.0	1	5
The higher the level of training paramedics have in psychological first aid, the less severe the psychological trauma suffered by the injured.	3.8	1.0	1	5

The table shows that the average responses of the sample members were all within the medium to high level, ranging between (3.5 - 3.9) on the five-point Likert scale, which reflects the paramedics' awareness of the importance of training in psychological first aid in enhancing confidence, improving the quality of care, and reducing the severity of psychological trauma for the injured. The standard deviations (1.0 - 1.2) also show a relative variance among sample members in their degree of agreement, which may indicate a difference in the level of experience or the number of training hours that each individual received.

Table (2) the relative distribution of sample members

Item	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
The training I received in psychological first aid was sufficient to understand the basics of psychological support for the injured.	10 (5%)	20 (10%)	40 (20%)	70 (35%)	60 (30%)
I have the ability to apply psychological first aid skills while responding to incidents.	12 (6%)	30 (15%)	40 (20%)	60 (30%)	58 (29%)
Applying psychological first aid actually helps reduce feelings of fear and confusion in those affected.	5 (2.5%)	15 (7.5%)	40 (20%)	70 (35%)	70 (35%)
The level of training I have received enhances my confidence in handling trauma emergencies.	10 (5%)	20 (10%)	50 (25%)	60 (30%)	60 (30%)
Psychological first aid training contributes to improving the quality of care provided to injured people in general.	5 (2.5%)	20 (10%)	35 (17.5%)	70 (35%)	70 (35%)
The higher the level of training paramedics have in psychological first aid, the less severe the psychological trauma suffered by the injured.	6 (3%)	20 (10%)	34 (17%)	70 (35%)	70 (35%)

The table shows the relative distribution of the sample members' opinions on the questionnaire items. It is clear that the vast majority of paramedics tend to agree and strongly agree with all items, as the overall

approval rates ranged between (59% - 70%). This reflects a strong belief in the importance of psychological first aid training in enhancing understanding of the basics of psychological support, increasing confidence in dealing with emergencies, and improving the quality of care provided to injured people, in addition to its role in reducing feelings of fear, confusion, and psychological trauma. Opposition rates were also relatively low (2.5% - 15%), indicating high satisfaction, while a percentage of respondents showed a neutral position (17% - 25%), which may indicate a difference in the level of training or the need for additional experience to consolidate these skills.

Table (3) Value Sig. (p) Interpretation

Test	Value	Sig. (p)	Interpretation
Pearson Correlation (r)	0.62	< 0.001	Strong positive correlation
Regression (R ²)	0.38	< 0.001	Training explains 38% of trauma reduction variance

Statistical results show that there is a strong positive correlation between the level of training of paramedics in psychological first aid and reducing trauma among injured people ($r = 0.62$, $p < 0.001$), indicating that the higher the level of training, the greater the ability of paramedics to reduce the severity of trauma. Regression analysis also showed that training explained 38% of the variance in trauma reduction ($R^2 = 0.38$, $p < 0.001$), which reflects an important and significant role of training, with other potential factors contributing to the impact on the level of trauma among the injured.

Table (4) Groups, Mean(s), Statistic, and p-value Interpretation

Test	Groups	Mean(s)	Statistic	p-value	Interpretation
Independent Samples t-test	Trained vs. Not Trained	4.0 vs. 3.3	$t = 4.25$	< 0.001	Significant difference, trained perform better
One-way ANOVA	Experience (<5, 5–10, >10)	3.4 / 3.7 / 3.9	$F = 3.85$	0.023	Significant difference, higher experience = better performance

The results of the statistical tests indicate that there are statistically significant differences between the groups. An independent samples t-test showed that the average performance of trained paramedics (4.0) was significantly higher than that of untrained paramedics (3.3), ($t = 4.25$, $p < 0.001$), confirming that training enhances case management efficiency. ANOVA test also showed significant differences between different experience levels (<5, 5–10, >10 years) with means (3.4/3.7/3.9) respectively, ($F = 3.85$, $p = 0.023$), which indicates that increasing years of experience is positively associated with better performance in applying psychological first aid.

Table (5) Groups, Mean(s), Statistic and p-value Interpretation

Test	Groups	Mean(s)	Statistic	p-value	Interpretation
Independent Samples t-test	Trained vs. Not Trained	4.0 vs. 3.3	$t = 4.25$	< 0.001	Significant difference in favor of trained paramedics
One-way ANOVA	Experience (<5, 5–10, >10 years)	3.4 / 3.7 / 3.9	$F(2,197) = 3.85$	0.023	Significant difference; higher experience linked to better performance

The results of the independent samples t-test indicate that there is a statistically significant difference between trainee and non-trainee paramedics, as the average response of trainees (4.0) was higher than that

of non-trainees (3.3), ($t = 4.25$, $p < 0.001$), reflecting the superiority of trainees in performing psychological first aid. A one-way analysis of variance (ANOVA) test also showed significant differences between different experience levels (<5, 5–10, >10 years), with means (3.4/3.7/3.9) respectively, ($F(2,197) = 3.85$, $p = 0.023$), which indicates that increasing years of experience is associated with an improvement in performance efficiency.

RESULTS

Psychological training for paramedics is closely linked to their ability to reduce the severity of trauma in injured people, as this training constitutes an essential tool in comprehensive emergency care. The relationship between them is built on the fact that the role of the psychologically trained paramedic is not limited to saving lives physically, but extends to include protecting the mind and emotions from the devastating effects of the traumatic event. Psychological training provides paramedics with the skills necessary to understand the natural responses to trauma, such as panic, denial, and confusion. This deep understanding enables the paramedic to deal with the injured in a calm and sympathetic manner, which reduces their feelings of isolation and fear.

The paramedic also learns effective communication skills such as listening without interruption, using comfortable body language, and providing clear and simple information. This type of communication helps restore a sense of control to the injured person, which reduces the severity of the initial shock. Psychological training also contributes directly to reducing the long-term effects of shock, as the initial psychological intervention lays a strong foundation for recovery. When the victim feels safe and supported in the first moments, the likelihood of developing psychological disorders such as post-traumatic stress disorder (PTSD) or chronic depression decreases. A trained first aider can also recognize signs of severe distress that require specialized intervention ensuring that the injured person will receive appropriate assistance at the appropriate time. Therefore incorporating psychological training into first aid training programs leads to an increase in the overall efficiency of emergency care. A paramedic who possesses psychological first aid skills is better able to deal with complex cases that combine physical and psychological injuries. This integrated approach not only improves the recovery outcomes of the injured but also contributes to enhancing the ability of paramedics to perform their work more effectively, which confirms that psychological training is not just an addition, but rather an absolute necessity in the field of emergency care.

factors Support And the obstacle To apply First aid Psychological Primary in The field

faces a set of supporting and hindering factors that directly impact the quality and efficiency of the support provided to the injured. Understanding these factors helps reinforce the positives and overcome the challenges, ensuring maximum benefit from these skills. The supporting factors can be explained as follows:

Advanced training is One of the supporting factors is that the more paramedics are trained in the latest psychological first aid techniques, the greater their ability to apply them effectively. Training does not only include technical skills but also focuses on how the paramedic manages his psychological stress during crises, and the integration of psychological first aid into protocols. When psychological first aid becomes an integral part of standard emergency response procedures, paramedics are committed to implementing it systematically. This ensures that the psychological aspect is not neglected in favor of the physical aspect. Another supporting factor is the presence of specialized teams in psychological support and psychological first aid at the scene of the accident, which facilitates the referral process and provides additional support to the injured. This cooperation between medical and psychological teams ensures comprehensive care and the presence of community awareness. When the community is aware of the

importance of psychological support in emergency situations Individuals become more receptive to help and the stigma associated with seeking psychological support decreases

The hindering factors can also be explained as follows

Lack of training and awareness It is one of the biggest challenges as many paramedics lack sufficient training in psychological first aid, which makes them unable to provide it effectively or even ignorant of its importance and time pressure In the field, paramedics often face significant time pressure to provide physical care and quickly transport injured people , which may lead them to neglect the psychological aspect due to time constraints. There may also not be sufficient resources available to support psychological first aid, such as additional support teams or the necessary tools and materials, especially in remote areas or in major disasters. Other challenges include misconceptions and stigma There is still a common belief that psychological support is less important than physical medical care, and some injured people may refuse psychological help due to the social stigma associated with it , which hinders the efforts of paramedics. Paramedics themselves also face significant psychological pressure in their work and if they are not adequately supported , they may not be able to provide psychological support to others This psychological exhaustion can negatively impact the quality of care provided to the injured person .

Recommendations The process To develop Programs Training And improve response paramedics

To develop training programs and improve the response of paramedics in the field of psychological first aid, a set of practical recommendations must be adopted that aim to integrate psychological support as an essential part of their duties. These recommendations can be explained as follows

- Psychological first aid should be integrated into the core curriculum of paramedic training from the outset , rather than being made optional or additional courses . This ensures that paramedics consider psychological support as an integral part of their work as CPR Curricula should focus on both theoretical and practical aspects so that paramedics learn not only the basic concepts of trauma but also practice communication and empathy skills through simulation exercises and role-playing
- Continuous training and periodic updating of skills must be provided. The field of psychological first aid is evolving, and paramedics need refresher courses to keep up with the latest methods and protocols. These courses can include workshops on specific topics such as how to deal with children, the elderly, or cases of violence. This ongoing training ensures that their skills remain effective
- Paramedics must be provided with their own psychological support where Paramedics themselves are frequently exposed to traumatic situations, which can lead to exhaustion and burnout. In order for a paramedic to be able to provide support to others , he or she must be supported. Therefore, psychological support programs for first responders should be established, such as briefings after major traumatic events or providing access to psychological counselors
- Strong partnerships must be built between paramedic teams and mental health professionals . These partnerships ensure that paramedics can direct injured people to specialist support when needed, and that there is a system in place Clear referral where mental health professionals can also participate in the training of paramedics to provide practical insights on how to deal with difficult cases
- Practical tools and resources should be developed that can be used by first responders in the field . These tools could be in the form of simple checklists or phone applications that contain quick and simplified instructions on how to provide initial psychological support. These recommendations work together. To create an integrated system that enhances the ability of paramedics to provide comprehensive emergency care, not only saving lives but also protecting lives and minds.
- Use of technology in training , where virtual reality(VR) and augmented reality(AR) technologies can be integrated into training , These technologies allow paramedics to practice psychological first aid skills in virtual environments that safely simulate traumatic situations. This type of training gives . them the confidence and experience needed before dealing with real situations

- Integrating self-assessment into training : Paramedics should be encouraged to continually evaluate their performance . Programs can include self-assessment forms to review how they handle different situations and identify strengths and weaknesses. This assessment helps them continually improve . their skills and encourages self-learning
- Promoting multidisciplinary cooperation Training programmes should include joint workshops with other entities such as police, fire brigades and healthcare providers. This collaboration enhances a shared understanding of the importance of psychological first aid and ensures a coordinated and effective response in the field

Research conclusion

From what has been presented, regarding the relationship between training paramedics in psychological first aid and their ability to reduce psychological trauma among the injured, we can say that integrating psychological care into emergency response is no longer a luxury but has become an absolute necessity as The results showed that systematic and continuous training of paramedics significantly improves the quality of initial intervention and reduces the likelihood of developing long-term psychological disorders such as post-traumatic stress disorder(PTSD). Understanding the factors that support and hinder the application of these skills in the field provides us with a clear roadmap for enhancing the positives and overcoming challenges . A trained paramedic is not only a lifesaver, but also instills security and reassurance in the souls of the injured during the most difficult moments . Therefore, psychological first aid must be considered an integral part of the core curricula for training paramedics, not just an additional subject . The future prospects in this field are promising, and require continued investment in advanced training programs and the provision of ongoing support for paramedics themselves. Modern emergency care must adopt a comprehensive approach that looks at the person as a whole

Therefore, the future of emergency care lies in a comprehensive approach that views the person as a whole . Psychological first aid is the foundation of this approach , and its development is not merely an improvement in individual skills , but rather a step towards building more resilient communities capable of recovering from crises . This research confirms that integrating psychological support into emergency response protocols is not an option, but rather an absolute necessity to ensure comprehensive and effective care . The results have shown that systematic training of paramedics in psychological first aid significantly reduces the severity of trauma among the injured and lays a strong foundation for their recovery . Understanding the supporting and hindering factors provides a clear vision of how to develop this field. The paramedic in the modern era is not only a savior of physical lives , as efforts must focus on several key axes to continue improving this field

prospects for developing psychological first aid

Our findings reveal broad prospects for the future of psychological first aid and place before us the responsibility of continuing development and improvement. One of the most important future prospects is investing in integrated and continuous training programs that are not limited to basic skills but include specialized training to deal with different types of trauma such as natural disasters, violent incidents, or trauma experienced by children. These programs must rely on modern technologies such as virtual reality (VR) which allows paramedics to practice their skills in environments that simulate reality safely, which , increases their confidence and efficiency

There is also a need to enhance field research and studies to evaluate the effectiveness of current training programs and identify best practices that can be applied in different fields . This research should focus on measuring the long-term impact of primary psychological interventions on the health of those affected. This provides strong evidence to support the importance of this field , and it is necessary to work on

building strong partnerships between different sectors, including academic institutions, non-governmental organizations, and government agencies responsible for health care . This collaboration ensures an effective referral system that connects patients with specialized psychological support after emergency care, ensuring continued recovery

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