PROFESSIONALISM

Why Paramedics Require “Theories-of-Practice”

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Abstract

This article discusses the role of Theories-of-Practice for health care professionals and specifically focuses on the need for such theories in the paramedic profession. Key benefits to the development of paramedic theory include occupational differentiation and self-awareness, and identification of appropriate research topics.

Almost all paramedic research, training and practice are focused on specific patient care assessments and interventions. A quick perusal of any Emergency Medical Service or prehospital care journal will reveal an impressive list of research articles that are focused on demonstrating the value (or absence thereof) of patient care procedures. This is important work, and indeed such research is required in order to appropriately define the medical aspects of paramedics' scopes-of-practice. However, there is an equally important need to research and develop theory about the whole practice of paramedicine as a profession. This perspective is different from narrowly focusing on discrete, technical patient care interventions, because it seeks to define the occupation more comprehensively, inclusive of all types of professional knowledge. When considering professional matters such as these, one cannot avoid comparisons to other professions and the interest in such theories among other health professions has been variable.

In medicine, Wiesing and Welie lament the absence of a formal theory-of-practice, acknowledging that “it has become painfully obvious that a ‘rational therapy’ has yet to emerge out of the enormous accumulation of newly gained scientific knowledge, while clinical medicine continues to be an uncertain business”.¹ Miettinen² echoes these concerns, stating that medicine is concerned as a practical matter, with diagnosis and prognosis based on probabilities, and as yet “there does not even exist, a codified body of theoretical tenets that ought to be adopted by practicing physicians to guide the production of gnosis [special knowledge] and health”. However, medical interest in this topic appears to be developing and for example, there is debate about the place of evidence-based medicine (EBM) relative to theories-of-practice, and the partiality of its influence on practice.³ Some of the issues included in these discussions are:

- the use of incentives vs. sanctions in terms of increasing the use of EBM,
- the relative roles of structure and uncertainty in practice, and
- the amount of disclosure of EBM's basic assumptions.⁴⁻⁷

Nursing efforts in this area have been prolific, with entire websites devoted to nursing theory. For example, one site lists over thirty-eight different site links, each one dealing with a specific theory.⁸ Nursing books on the topic are also readily available. Parker's "Nursing Theories in Practice"⁹ provides detailed narratives on nine key theories of nursing. One can speculate that nursing's sustained efforts are at least in part intended to define its professional identity, although it is also true that theory is essential for the development of professional knowledge.¹⁰

Attention to theories-of-practice holds considerable promise for paramedicine, although to date, the clinical aspects of this work have been considered in a de-contextualized fashion, without regard for the environment within which paramedics practice.

Formal context based theories would provide more accurate and useful knowledge, because as described by Hass and Shaffir, professional knowledge is the bedrock of competence "... in the case of patient relationships with medical professionals".¹¹ This type of research would significantly advance paramedic professionalization. While other health professions may indeed have variable interest in this type of occupational research, for paramedics, the need is acute. Why? Because paramedicine has neither medicine's long history of professional presence nor the occupational research base of nursing and is therefore often assumed to be a hybrid of knowledge and skills taken from other pre-established occupations.

For paramedics to more fully establish their own unique identity, they need to demonstrate professional self-reflection, and formal occupational research represents an important method of doing so. Yet simple description of the environment, without abstraction into concepts, would limit our knowledge to a simple list of examples, and examples do not equal theory.¹²

To fully capture paramedic knowledge, one needs theory. Although there are many definitions of theory itself, one applicable (and well used) theory from the social sciences is provided by Strauss and Corbin as "a set of well-developed concepts related through statements of relationship, which together constitute an integrated framework that can be used to explain or predict phenomena".¹³

Certainly in the field of theory-building, there are levels of theory such as grand, mid-range and substantive¹⁴ and one must consider this and one's objectives when constructing theory. Theory that is applied specifically to an aspect of the practice context should be considered at the substantive or "local" level. This means that these types of theories are intended to primarily be applied in a limited manner. In terms of developing paramedic theories, this is a good starting point.

As an example, one such theory, which focuses on a discrete aspect of practice, is *The Space-Control Theory of Paramedic Scene-Management*¹⁵ and is briefly outlined in Appendix 1.

However, the paramedic field-of-practice is rich with unexplored opportunities for research on the full range of paramedic work. This is evidenced by the fact that no research articles related to paramedic scene-management were identified in an electronic search of the archives of six major medical journal collections, specifically:

- Academic Emergency Medicine,
- Canadian Journal of Emergency Medicine,
- Journal of the American Medical Association,

- British Medical Journal,
- New England Journal of Emergency Medicine,
- Journal of Emergency Primary Health Care.

Examples of ideal candidates for research would include social science examination of inter and intra-crew interaction related to specific “types” of calls such as medical, trauma, and psychiatric.

Occupational knowledge is not static and it is important for paramedics to establish their knowledge as the various aspects of their work change. Such work would help differentiate paramedic practice from related professions and assist with the identification of the most appropriate research topics. Paramedics and researchers should consider their profession from a broad perspective and define a research agenda accordingly.

Appendix 1
A Brief Overview of the “Space-Control Theory of Paramedic Scene-Management”

This theory was developed using the social-psychological perspective of Symbolic Interactionism¹⁶ and Grounded Theory Methodology.¹⁷ Data were obtained from in-depth, semi-structured interviews with 24 paramedics. These paramedics were drawn from three levels of expertise: novice, experienced, and expert; and three areas of practice: urban, sub-urban, and rural.

This theory maintains that while paramedics frequently perform risky emergency medical procedures, the use of these procedures is not a sufficiently unique occupational characteristic to distinguish paramedics from other healthcare personnel. What sets paramedics apart is the setting in which they practice. Paramedics must “fit” medical procedures into their work context and consequently, paramedics practice a unique type of care referred to in their occupational literature as “prehospital care and transportation of the sick and injured”.¹⁸ This care is provided outside of any formal institution, which means in plain language that they practice “in the street” and perform in “a context rife with chaotic, dangerous, and often uncontrollable elements with which hospital-based practitioners need not contend”.¹⁹

Given the challenges inherent in this practice context, one particularly important aspect of paramedic work is the ability to manage an emergency scene, and so it is not surprising that competence in this area has become a highly prized ability within the occupation. This is reflected in a review of paramedic work conducted by Metz who observes that from the paramedics’ point of view, “the measure of a man or woman doing paramedic work is always decided at the scene [emphasis added]”.²⁰

In contrast to other health care providers, paramedics do not have predetermined work areas. Rather, they must accept the location where they find a patient as their working area and adapt themselves and the environment around the patient accordingly. This adaptation is directed towards enabling the provision of the patient care needed by the patient. Overall, paramedics achieve this adaptation by controlling the activities that take place in the space immediately surrounding the patient. In this theory, the space (or environment) is interpreted broadly to include both human and physical (non-human) elements. This theory seeks to explain why and how paramedics achieve the remarkable objective of transforming everyday, uncontrolled locations where emergencies suddenly occur, into settings that can be used to effectively deliver emergency patient care.

Although there are certainly physical realities that present problems for scene- management, for the most part the management of the scene involves how paramedics interact with other people. Indeed, it is through working with others that paramedics are able to solve the problems presented by both physical and human elements. This means that scene-management is a dynamic, social activity comprised of social processes.

Scene-management operates on a pervasive basis during an ambulance call. Sometimes its various elements are in the background and sometimes they are in the foreground, but they are always present and determine outcomes. There is a certain irony in the reality that although scene-management operates on this pervasive basis, and indeed must do so in order for patient care to actually take place, there is a public perception that it is the technical patient care procedures which comprise the important aspects of ambulance work.

Paramedic adaptation of the emergency scene includes five key theoretical categories of social processes specifically:

- *establishing a safety zone,*
- *reducing uncertainty through social relations,*
- *controlling the trajectory of the scene,*
- *temporality at the scene, and*
- *collateral monitoring.*

Each of these categories is comprised of a number of sub-categories. Establishing a safety zone is comprised of:

- *the “what-if” strategy,*
- *rationalized self-interest, and*
- *trading-off patient care and scene-safety.*

The category of reducing uncertainty through social relations is comprised of:

- (a) negotiating the division of labour with allied personnel:
- (ai) negotiating the inclusion of fire department personnel,
- (aii) negotiating the exclusion of police personnel,
- (b) allocating tasks to non-allied personnel, and
- (bi) reading the crowd including assessing potential for assisting or hindering.

The category of controlling the trajectory of the scene is comprised of

- *clinical considerations,*
- *non-clinical considerations,*
- *optimizing efficiency, including multi-tasking, and*
- *modifying procedures.*

The category of temporality at the scene is comprised of

- *determining clinical urgency,*
- *uncertainty of diagnosis and prognosis,*
- *management oversight, and*
- *scene circumstances.*

The category of collateral monitoring is comprised of

- *trading-off attention and*
- *optimizing efficiency.*

The Space-Control Theory is depicted in Figure 1 below:

Figure 1. The Space-Control Theory of Paramedic Scene-Management

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