

HESAV-SCHOOL OF HEALTH SCIENCES

MULTIDISCIPLINARY RESEARCH, SERVING THE HEALTH CARE FIELD

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HESAV and health sciences

Anchored in practice, HESAV research maintains a focus on socio-health challenges. It aims to serve students and health professionals, as well as the various players in our healthcare system and health policy-making.

The challenges of healthcare are complex, constantly evolving and interacting with multiple factors, whether biomedical, social, demographic, economic, judicial, or political. To address this, HESAV focuses on multidisciplinary research, producing rigorous knowledge strongly anchored in professional fields and in our social and healthcare context.

Since health professionals education is now at level of Universities of applied sciences and art are, it raises in innovative way the question of their role and contribution, not in terms of professional practices, but equally in terms of production of scientific knowledge.

In this regards, HESAV seeks to fulfill a dual aim. On one hand, it aspires to contribute to the improvement of care practices through evidence-based knowledge. Whether for promotion of health, prevention, care or rehabilitation, healthcare professionals must both integrate and produce scientific knowledge that can improve care interventions and practices. On the other hand, HESAV analyses issues related to our health care system as well as emerging societal changes. At the intersection of different disciplinary perspectives, our projects shed light on the multi-dimensional health-related issues, as well as allow us to understand their complexity and anticipate the challenges therein.

With this aim in mind, HESAV jointly promotes both clinical research, placing patients and healthcare professionals at the heart of its concerns; and health humanities, drawing on human and social sciences to understand the complex and multilayered dimensions influencing health.

In other words, research, conducted in close cooperation with fieldwork, seeks to improve the health of the general population, the healthcare practices as well as to contribute to the reform of social and health-related institutions or public policies.

Multidisciplinary research, serving the health care field

HESAV research themes

HESAV promotes high-level disciplinary and multidisciplinary research founded upon the professional expertise developed in its four fields of study – nursing, physiotherapy, radiologic medical imaging technology, midwifery – as well as upon competencies in social and human sciences applied to the health field.

Since the multi-dimensional context of life in society organizes, structures and shapes the experience not only of users of the health care system – be it in terms of behaviours, expectations, relationship to health and illness -, but also of health professionals (individually or collectively) and of the health care system itself, HESAV research systematically takes into account the links between social factors and health within a biomedical or psychosocial perspective.

Projects conducted by our researchers revolve around nine main thematic axes:

Interventions in the health care field and the needs of patients and informal caregivers:

- Population aging, transitional and end-of-life care
- Mental health
- Chronicity: health promotion, care interventions and rehabilitation
- Movement, sport and health
- Development, health care techniques and biotechnology

Health, medico-social context and professional training:

- Interprofessional practice and communication
- Professional education, representation and practice
- Research on healthcare services
- Public policies, legal frameworks and health

Population aging, transitional and end-of-life care

Within a context of increasing life expectancy, it is critically important to address issues pertaining to old age, in particular with regard to the experience of chronic illness.

Health and quality of life are legitimate aspirations for a population whose life expectancy is increasing. However, illness, most often chronic and progressive in nature, does accompany aging. This constitutes a major challenge for professionals and health care institutions, as well as for patients and their loved ones.

Multidisciplinary and inter-professional, this research axis is deployed in two complementary directions.

The first focuses on an analysis of the perspectives, needs and expectations of the elderly and their informal care givers. It also examines the representations and practices of the professionals that provide care for them, as well as the negotiations required in view of the different skills and approaches of all actors involved.

Care pathways and therapeutic transitions experienced by patients suffering from chronic illnesses, home care issues as well the roles and needs of informal caregivers are also the subject of studies conducted by our researchers.

The second focus is concerned with end-of-life issues. How do patients experiment the shift in care paradigms when treatment goals change from therapeutic to palliative? Management of symptoms, acceptability of treatment regimens, vulnerability, involvement of the primary network, and role of health care professionals are all issues to be explored, whether the palliative phase of care takes place at home or in a health care institution. Finally, research on assisted suicide provides an opportunity for highlighting different approaches of representations of health and death and bring to the fore the subtle and difficult negotiations between critically ill persons, their relatives and friends, and members of the health care teams.

Mental health

Concerned with upholding humanistic, respectful psychiatric clinical practice, HESAV develops interdisciplinary research projects centred on mental health care, focusing in particular on acute inpatient psychiatric care.

The high prevalence of mental illness is a great challenge not only for our health care system but also in terms of public health and even as a societal problem, since the issues that arise from it affect all aspects of living-together in the community (security; indirect costs due in particular to difficulties in the field of employment; role of informal caregivers; stigmatization; etc.).

Several projects focus on analysing the effectiveness of care interventions. Pinpointing the importance of treatment alternatives to medication, our teams are interested in issues such as the clinical indications and effectiveness of packing therapy, as well as in changes taking place in clinical interventions in the field of autism aimed at achieving better articulated care programmes and improving communication between professionals, parents and patients.

Violence in treatment situations and the ways in which violent crises can be managed are also issues investigated by our researchers. A wide range of studies carried out at HESAV have dealt with issues including: theoretical knowledge and concrete approaches used to manage violent episodes; the impact of recourse to police interventions in crisis situations; evaluation of interviewing techniques aimed at improving initial care and prognosis for patients experiencing acute psychotic episodes...all these projects contribute to our understanding of the importance of the relationship between professionals and patients and highlight the relevance of early intervention strategies.

Finally, an innovative project focuses on rethinking intensive care practices in the context of treatment for acute psychiatric episodes through the development of a musical device to be integrated into intensive care rooms and the evaluation of its benefits for patients and for the quality of the care relationship.

Chronicity: health promotion, care interventions and rehabilitation

Current lifestyles noticeably increase the prevalence of chronic somatic illnesses.

Many aspects of our current lifestyles (stress, sedentariness, poorly balanced diets, sleep problems, smoking, etc.) contribute to the emergence of chronic illnesses. As leading causes of death worldwide, these pathologies have grave social and economic consequences. Yet the implications of chronic illness are greatest for sufferers themselves and for their primary network: aside from the complex nature of managing the illness itself, interpersonal relationships as well as professional, leisure and daily activities are often affected, increasing the incidence of mental health problems. Interventions aimed at reducing the prevalence and severity of chronic illness are thus central to health policies. Measures aimed at social and professional integration are also important components of the work of health professionals.

Research projects at HESAV aim to respond to the needs of patients as well as to those of informal caregivers and of the professionals involved. To this end, a global approach to chronicity is required, including biological, relational, psychological and social aspects. Current projects look at chronic pain and means of alleviating it; at the patient's management of their illness; at patients' adherence to treatment and at their ability to achieve self-care (notably in the context of several projects on diabetes); at rehabilitation and social integration measures; at the adequacy of care interventions; at the roles and needs of informal caregivers; and at relationships with professionals. Interdisciplinary approaches and research designs make it possible to integrate the complementary perspectives that are crucial for a global understanding of issues related to chronicity. For example, neurosciences, clinical sciences and social sciences may all examine the experience of pain in patients with spinal cord injuries, while clinical instruments are simultaneously developed with the aim of quantifying neurological dysfunctions following a spinal cord injury.

Movement, sport and health

Physical activity and, more broadly, a specific population's relationship to the body, are closely connected to the social context in which it takes place since this area of life is characterised by the widest variations in terms of generation, gender and socio-economic status.

Movement and sport have both mental and physical health benefits, reducing risks for cardiovascular disorders/strokes and non-communicable diseases. Physical activity also transforms and questions our relationships with our bodies and with health and illness.

HESAV research therefore seeks to analyse the links between health and sport – be it with regard to prevention (illness, accident), to care interventions, or to rehabilitation – in both their biomedical and socio-historic dimensions. Research questions are elaborated in three complementary areas.

Elite and extreme sport

Sport is also about a quest for performance, and this search seems to endlessly push back the limits of the body. Interested in the field of elite sport, research conducted at HESAV investigates the role of health professionals in terms of optimizing preventive health interventions for elite athletes in order to improve performance. Scientific knowledge is also gathered on the effects of fatigue (ultra-trail), hypoxia (activity at high altitudes), sleep deprivation (pathological or in the context of ultra-endurance racing) on the body and on health in general.

Sport and handicap

Physical activity for people with reduced mobility, particularly for children with multiple handicaps, is at the heart of several research projects. Indeed, setting the body into motion results in dynamic postural adjustments with beneficial effects that, beyond the enjoyment they provide, are comparable to the impact of some therapeutic interventions.

Sport, body and life course

While sport was viewed, until recently, as reserved for the young, it is now practiced throughout life, including by the oldest individuals. Closely linked to gender roles and socio-economic status, the different forms that sport may take through the life course bring up new questions for health professionals: how do representations of the body and of health evolve throughout the lives of practitioners of various sports? How do athletes make decisions about the end of their careers? What are the links between physical activity and procreation for women?

What consequences – positive or negative – does physical activity have in relation to the aging process? Shedding light on these questions should help health professionals to provide appropriate care to practitioners of sport and enable them to prepare for the consequences of the unprecedented increase in the duration of the practice of sports.

Development, health care techniques and biotechnology

When research results lead to the development of devices, instruments or techniques in the health care field.

Development projects make it possible to build bridges between research results and practice through instruments and techniques that can have direct impacts in improving health care interventions as well as in furthering the autonomy of individuals. Project development mostly takes place in two areas: protocols and techniques used in health care institutions on the one hand, and conjoint work with the field of engineering on the other.

Engineering and health

In order to better mobilize interdisciplinary skills, HESAV and the HEIG-VD have created the ingénierie&santé (engineering&health) platform. The platform's goal is to offer an optimal framework within which to promote the development of technological devices and tools that require both a high level of expertise in the health field and various kinds of specialized input from the field of engineering.

Our projects offer a broad range of technological developments tailored for the health field and for health care professionals; they range from projects focusing on robotic training systems for hemiplegic patients through serious game applications adapted to their specific needs, to the development of IT applications enabling continuous mobile access to biomedical information by emergency services teams, and to the use of Tarmed (medical billing) data to measure the level of irradiation in a population.

Similarly, specific tools are being developed for teaching, such as e-learning platforms and software designed for the use of digital images in the professional education of radiology and medical imaging technologists.

Interprofessional practice and communication

Communication with patients, informal caregivers and all professionals involved in health care interventions is a key element in improving the quality of care and ensuring the collaborative practices required to coordinate patient care, be it within an institutional, ambulatory care network or home care context.

Communication is a central aspect of health care activity as it plays a key role, notably in terms of quality care for patients and their relatives, therapeutic education, support to patient autonomy and adherence to treatment. While a consensus exists on the importance of communications skills with patients, informal caregivers as well as professionals engaged in joint care work, there is little evidence-based knowledge on its concrete modalities.

HESAV research projects thus focus on evaluating various communication strategies available to health care professionals in order to study their impact on health care interventions and on treatment objectives.

Yet today's greatest challenges lie in the field of collaborative practice. How do professionals share their knowledge and apply their skills to benefit patients as well as other care professionals in order to improve the quality of care interventions? Our research seeks to analyse the concrete modalities of collaborative practice, that are essential to the coherence of care practice as well as to all aspects of care transitions and follow-through of a patients' treatment pathways. It has the goal of gaining a better understanding of the specific professional roles of members of health care teams as well as of enabling them to broaden their field of intervention through furthering their ability to learn from others and with others. Such knowledge is fundamental if professionals are to be able to act at the structural level, within health care institutions; it is also crucial for training and skills development, so that inter-professional collaboration can be promoted.

Professional education, representation and practice

Research in this area focuses on the stakes and consequences of significant changes currently taking place within professional practice as well as within professional education in the health care field.

The health field is going through profound changes: shortage of qualified personnel, early discharge of patients after hospital stays, use of short-term contracts for staff in some sectors, new professional roles, implementation of professional education at the University of Applied Sciences (HES) level, internationalisation of studies and careers – these are issues on which an institution of higher learning must conduct research and increase available knowledge.

Our research also analyses the visions and divisions across the health professions as a function of the social position of the individuals involved and their professional trajectories. It also studies the process of developing clinical and relational competencies, all the while questioning the representations of professionals and the impact they may have on clinical practice.

Current projects examine, for instance, decision-making by midwives during complications in labour taking place outside the institutional health care environment, technical mediation taking place in the practice of radiologic medical imaging technologist, and the effects of gender and horizontal segregation on the daily practice of male nurses or male radiologic medical imaging technologists.

The processes of institutionalisation of health care professions – which led to the establishment of Universities of Applied Sciences in the health care field – are also central to our investigations and require identifying the actors, the challenges and the underlying interests at play. Consolidating knowledge of the realities and of what is professionally at stake is essential – be it in the ways in which the nursing profession is structured, or in the social history of physiotherapy in Western Switzerland, or in the field of psychiatric care. This type of research is fundamental not only to inform decision-makers who must design future reforms, but also to orient professional education programmes at a time when all health care professions are undergoing extensive change.

Finally, a range of pedagogic modalities and innovations (notably simulation-based training, inter-professional education and e-learning) are also examined in order to bring to light their relevance to improved training and to the promotion of skill development in our students.

Overall, this axis of research aims to reinforce an understanding of the ways in which social relations tend to determine both representations and practices in the health care field, thus contributing to the development of reflexive professionalism in terms in professional education as well as practice.

Research on healthcare services

In the face of current societal challenges, health care research must contribute to health care system reform.

Well suited to acute care situations, the health care system must better integrate profound changes taking place today (population aging, chronicity, rehabilitation, expectations surrounding birth and delivery settings, etc.). Health professionals find themselves at the heart of these issues. Their expertise enables them to build bridges between acute clinical care and the field of medico-social service provision; it allows them to produce crucial knowledge needed to efficiently design and structure care interventions and health care services.

Research in this field is focused on health care sectors, on hospital and institutional structures for the elderly or for chronic care, as well as on new treatment and care modalities. It produces knowledge about such issues as the transitions between hospital care or rehabilitation services and returning home, the organization of work within home health/home care services, the social integration of residents who enter nursing homes and the implementation of nursing consultations for the follow-up of patients suffering from chronic conditions; these projects all contribute to the structural improvement of institutions as well as to reorientations of the healthcare system.

We also study innovative solutions for managing dependency, whether in the sector of private for-profit home care and home health services or through an examination of the setting up of geriatric services within convents, with a view to setting up of geriatric services within convents, with a view to envisioning the implementation of alternative care models while also shedding light on aspects of current health policies and structures.

Finally, research in this field examines the expectations of women in terms of labour and delivery, as well as the responses of hospitals and birthing centres in terms of (de) medicalization of the birth experience – thus exploring the specific role of midwives.

Public policies, legal frameworks and health

Political decisions, legal frameworks and public policy choices have an impact on the health of populations, particularly in terms of access to the health care system, of working conditions and social inequalities in terms of health and of resources available to individuals. It is therefore essential to conduct investigations analysing the link between the socio-political context and health.

In this area, HESAV research projects focus on the impact on health of public policies, and of the provision of health care by existing services. Various current issues are addressed, such as the way in which organ donation has been framed as a public health care challenge that feeds current debates on the shortage of organ donors in Switzerland. One project looks at the consequences of new policies concerning back-to-work programmes and disability insurance provisions on beneficiaries of services; another looks at the effects on care practices and on the experience of psychiatric patients brought about by involuntary institutionalisation. Finally, the research also raises questions about the links between the political and legislative environment and issues such as the quality of screening programmes using mammograms, or of measures for radiation protection.

Health in the workplace is also a major challenge. Among other issues, we are studying means to promote breastfeeding in the workplace, as well as prevention measures and practices aiming to reduce professional risks in the context of the protection of pregnant workers.

Finally, legal research projects are tackling the question of financial compensation for informal caregivers, as well as the issue of health insurance coverage for specific health care interventions these caregivers provide.

Find all the researches
on our website:

<http://recherche.hesav.ch>



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