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Motivational dynamics and impact on performances: The case of physicians of university polyclinics in the NHS scenario

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Abstract

Rationale: The principle of inseparability of teaching, academic research and assistance to patients, to which university physicians are subject in carrying out their work, invites reflection, aimed at identifying a combination of the three activities characterised, at the same time, by efficiency and effectiveness.

Aims and Objectives: The present paper illustrates a paradigm based on the balance of intrinsic and extrinsic motivations with the purpose of identifying an efficient solution in the performance of the duties of university doctors.

Methods: The analysis refers to Italy in terms of the main scenario, or, conversely, the achievement of more profit-related goals.

Results and Conclusion: Depending on the prevailing goal, it is possible to recognise the superiority of the constitutional principles.

KEYWORDS

academic performance, constitutional principles, intrinsic and extrinsic motivations, motivational dynamics, patient assistance

1 | INTRODUCTION

In carrying out their activities, university physicians must observe the principle according to which teaching, research and assistance to patients are inseparable from each other. From the reflections that can be advanced on this topic, that see, first of all, the difficulty in balancing these tasks, a research project has recently been instituted at the University of Messina, Italy, with the aim of suggesting a useful combination of the three activities, in accordance with the principles of efficiency and effectiveness.

The activity of doctors is driven not only by *extrinsic* reasons, often financial in nature, but also by *intrinsic* motivations, based on the values which underlie the social order. The literature on the impact of motivation at work on performance[1–11] has outlined how a knowledge of individuals' motivations is essential for achieving an efficient and effective management of healthcare facilities.

In this perspective, the interventions of the legislator may have generated some trade-offs for the subjects involved (university doctors, polyclinic hospitals and the National Health System—NHS), as well as conflicts in the organization of these activities. The theme of motivations, extrinsic and intrinsic, that drive physicians' actions, is described with regard to university polyclinics. The Italian regulatory framework is specifically taken into account, in particular the Legislative Decree No. 517/1999, which governs the relationships between the NHS and the universities, and Law No. 240/2010, which contains the rules on the organization of universities.

The objective of this contribution, introductory to the above-mentioned research project, is to define the characteristics of the

motivations for university doctors and the likely impact on the health and well-being of patient populations.

2 | 'INTRINSIC' AND 'EXTRINSIC' MOTIVATIONS

Motivations represent a multifactorial construct, according to which each individual decides what is relevant to himself. The aspects that contribute to defining the context within which the choice is taken are many and variously related to each other. They originate from psychological, cognitive, as well as relational and emotional elements. The motivational element has always been a relevant aspect of economic behaviour, especially of physicians' intrinsic motivations: empirical and experimental evidence, in fact, has demonstrated the relevance of 'nonselfish' motivations.[5] In physician's actions there may be, however, a direct correlation between levels of wages and job satisfaction.

Current literature demonstrates that what distinguishes intrinsic motivations from extrinsic ones is self-determination.[12] If extrinsic motivations are concerned mainly with the material consequences deriving from the wages obtained and, in general, with everything that is perceived as a reward (monetary reward, approval or the possibility of avoiding negative consequences), intrinsic motivations concern the individual's desire to engage in those tasks to which he attributes value for his own satisfaction and personal challenge, retrieved by carrying out that activity.[1,4] An intrinsically motivated worker goes beyond his duty, to the point of being induced to accept even less monetary compensation than he could aspire to.[8] Job satisfaction does not decrease, since, in the utility function, the intrinsic reward supports wages: the final result depends on the weight that the worker attributes to each of the two components.

There is mutual influence between the two types of motivation as well as a 'crowding-out' effect between the two motivations[13]: an excess of extrinsic motivations displaces the intrinsic ones, so that there can be a reduction in the individual commitment. In setting physicians' preferences, wages are not always interpreted in a positive perspective; rather, wages may be considered as an element likely to exert distorting effects regarding other motivations (such as subjective factors as personality, ability, knowledge, skills and experience).

Organizational and task distribution factors can also contribute to increasing motivations,[14] adding to the individual motivations the impact of physicians' performances on the institution to which they belong. Being intrinsically motivated does not mean, however, accepting a lower wage. In this sense, Brennan[15] proposes to compose the physicians' wage in such a way that may allow self-selection by motivated workers. By offering a lower wage than the market wage and eliminating the difference through fringe benefits (e.g., for university professors, the possibility to obtain research funds), the remuneration would ultimately attract only the 'good' workers.

As far as the healthcare sector is concerned, fringe benefits are not only material. For example, for physicians, some analyses have highlighted the importance of the work environment and the relationships with colleagues and patients for professional satisfaction.[16] Symbolic and relational remunerations add to lower wages as self-selection tools. A final aspect concerns the attitude of the subject towards the work before and after undertaking it.

With regard to the academic environment, where the selection requires elements of vocation such as dedication to research and students, it would be necessary to verify whether it is the motivational drive that induces academics to choose that job, even accepting a lower wage than expected, or if the same reason is recognized only later. This means that the university doctor, who also holds the role of professor, recognizes from the beginning of his career that it is an obligation for a good teacher to engage in teaching and research, as well as to assist patients.

3 | MOTIVATIONS AND ORIENTATION TO WORK

An appropriate combination of extrinsic and intrinsic motivations is desirable to obtain high levels of performance, both individually[17] and within the institutions involved.[18] According to indications from the literature, at least three types of job orientation could be distinguished.[19] The work activity could be carried out as a job: in this case, the individual would be motivated only extrinsically, since his main objective would be to receive a remuneration in return for his activity. In a medium–long-term perspective, in which it is more important to secure a higher expected wage, the acquisition of power or a certain social status, would lead to identify the job as a career, underlining the extrinsic motivational plan. Finally, there is the case in which remuneration and social prestige are not the most relevant factors and attention is paid to the activity itself and the satisfaction derived from its performance. This situation reveals a calling orientation, or vocation, in which the individual is completely involved. The positive consequences of this kind of approach to work are attributable to the coincidence between the individual's and the institution's objective. It could be defined as a 'flow' in which intrinsic motivations and performances interact and allow to reach levels of care of high quality.

Some considerations regarding the reference regulatory framework may be advanced; the normative system is an element that defines and conditions physicians' objectives. In Italy, the right to health and the freedom of research and teaching are provided for by constitutional rules (Articles 32 and 33), by the Legislative Decree No. 517/1999 and by Law No. 240/2010, which concerns the university system and deals with the aspects of research and teaching. These legal provisions present interpretative uncertainties, which may determine a lower performance of the healthcare facilities (in this case the polyclinic hospital) as well as a limitation of the mission of the university doctor.

Looking at the profile of responsibility, the university doctor has to interact with two distinct subjects: on the one side there is the Academy, in the person of the Rector of the University, for questions relating to teaching and research. On the other side, there is the polyclinic hospital, represented by its general manager, as regards the healthcare to be provided to patients.[20] Hence, the physician must solve a multiobjective optimization problem, linked to the need to decide how to allocate the scarce resources available (first of all, time) between the activities he is required according to law.

Let us assume that the objective function of the university physician is defined only by extrinsic motivations in a medium–long-term context, and that, therefore, the doctor aims exclusively at obtaining a higher income and career advancement. The Law No. 240/2010 requires university professors to have a certain scientific productivity and to observe teaching duties, that are defined by a given number of teaching hours. Participation in the distribution of research funds[21] depends on scientific productivity and teaching duties carried out (number of students attending courses, ability to attract new students to the degree courses). Are, these ones, the most important objectives to consider?

Since the role of university polyclinics is planned as a function of the National Health Services, according to the Legislative Decree No. 517/99, the achievement of public funds must be meant as an intermediate objective towards the attainment of the common good, that is, public health. Instead, aiming only at the allocation of financial resources could lead to schemes of competition that would not guarantee satisfactory results. Unfortunately, Law No. 240/2010 does not provide for any intervention to enhance the intrinsic motivations, which could give strength to the physicians' vocation. Although these reasons are not recognized, their impact, in terms of effort, is high; in subjects with little or no intrinsic motivations, the failure to recognize such motivations as a determinant element in the healthcare provision, would eliminate the possibility of positively affecting, from a qualitative point of view, both the performance of the university doctor and the quality of healthcare.[18] If we adopt a broader perspective, the effects in terms of financial imbalance between different geographic areas and the inequities among patients are significant: a consequence is the mobility of patients across Regions determined by demand for quality.

For Italy, the statistics of the CENSIS Report,[22] elaborated, for the period 2005–2016, on data from the Ministry of Health, show that the reasons for hospital migration may be found, for 66.2%, in the search for quality of the structures, the physicians' competence and the quality of human relationships with medical and paramedical staff. The relevance of the qualitative element is then confirmed by the data of the National Outcomes Programme—*Programma Nazionale Esiti*,[23] according to which the reason for the mobility for ordinary hospitalization and in day-hospital lies in the quality of care that can be obtained in other areas of the country, as well as in the poor accessibility to health services, due to waiting lists.

Regional mobility implies that many financial resources move from South to North, with a consequent impact on the financial balance of some Regions.[24] In Italy, in 2017, the value of healthcare mobility amounted to €4578.5 M (4% of total healthcare expenditure).[25] The six Italian regions with the greatest attractiveness of health services (Lombardy, Emilia Romagna, Tuscany, Veneto, Piedmont and Lazio) boasted credits exceeding €200 M.

In one case, a university physician perceived his work as characterised by a calling-type orientation, his mission would be health protection. In this light, academic research and teaching would play an instrumental role with respect to the objective of common well-being. In Italy, the constitutional legislator intended to privilege this perspective, by first providing health protection (Article 32 of the Constitution) and then strengthening it with Article 33, which guarantees freedom of research and teaching.

Overall, patient well-being has become a key element of current health policies, in a perspective in which it is the patient to be the 'subject' and not the 'object' of medical treatments. In this sense, Article 5 of the Legislative Decree No. 517/99, provides that the assistance activity of the university doctor cannot be organized in such a way as to hinder research and teaching and should be understood as a need to obtain useful results; for this purpose, academic research carried out by physicians needs adequate time and more resources. Hence, interventions are needed to encourage organizational innovation processes, the active participation of the parties involved and the definition and compliance with the rules. The latter must be made flexible to cope with challenging situations, so to constitute the mix of a recipe characterised by simple yet effective traits. Intrinsic motivations constitute an essential element, capable of making a difference: their incidence in defining the modalities of action cannot be ignored.[18]

4 | CONCLUSION

The framework of analysis described in the present article shows that it is impossible to ignore the inclusion of intrinsic motivations in the definition of the objective functions of the various subjects involved: the physician, the University Polyclinic Hospital and the NHS. The latter, in particular, share the characteristics to be institutional. In the event that the university doctor prefers extrinsic motivations, attributing, for example, a higher value to increased wages, his career objectives would be in contrast with that of health protection, which is specific to the NHS, and the overall quality of services would decrease.

It might be possible to talk, in this case, of trade-offs between multiple objectives, without limiting discussion only to the aspects of efficiency and productivity, according to a purely utilitarian vision. Rather, a restyling of the criteria for measuring the performance of the NHS in terms of quality should be pursued and future health policy actions may depend on these criteria: parameters such as, for example, mortality rates, life expectancy for some pathologies, and the degree of satisfaction and well-being expressed by the patient might be suitable indicators of well-being as expressed by the patient.

It is necessary to take into account this sort of 'cultural revolution', against which concrete awareness-raising attempts have

recently been realized: for example, the inclusion in international recommendations of infant mortality rate or, in general, indicators of health and well-being for citizens of all ages, which indicate the degree of civilization of a people and is, at the same time, the expression of a path towards economic and social sustainability.[1] In this context, it is obvious that health protection services must be of adequate quality.

In conclusion, the objective that has to be considered a priority for the interest of the community is health for individuals, even if it is not easy to identify the tools that can satisfy such objective and the weight to attribute to physicians' academic research, teaching and assistance to patients. The achievement of this goal is possible due to the enhancement of intrinsic motivations; in this sense, the transformation of the organizational structure from vertical to horizontal, considering everybody at the same level with equal needs, can make the difference.

A reflection on the work of the legislator appears compulsory. Intrinsic motivations must balance with extrinsic motivations to lead to more effective actions within a health policy perspective.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Although the reflections at the basis of this paper derive from the examination of data collected for a wider research project, the same data have not been used for this article.

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[1]Guaranteeing health and well-being for all people, in spite of their age is one of the sustainable development objectives contained in the 2030 Agenda adopted in September 2015 by the 193 states of the UN General Assembly. The Agenda underlines how the aspect of quality in achieving the health objective appears among the most relevant factors (see https://unric.org/it/agenda-2030).

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