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Poor Physician Performance in the Netherlands: Characteristics, Causes, and Prevalence

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Introduction:

Poor physician performance has a profound impact on patient safety and society's trust in the health care system. The attention that this topic has received in the media suggests that it is a large-scale issue.

However, research about physician performance is still scant; there is little evidence regarding its prevalence. In terminology, characteristics and causes of poor performance seem to be used synonymously. The aim of this study was to describe (i) characteristics of poor performance, (ii) causes contributing to its onset and continuation, and (iii) prevalence of poor performance among physicians in the Netherlands.

Methods: This is a mixed-methods study involving literature review of 10 electronic databases, review of disciplinary law verdicts, and 12 expert interviews. Each of the 3 methods contributes to the aims of our study.

Results: Characteristics of poor performance are predominantly described by deficits in individual physician knowledge, skills, and behavior.

Causes of poor performance include aspects such as poor collaboration, lack of criticism, insufficient leadership, and lack of professional development.

A prevalence rate of 5% was judged by the experts to be realistic; evidence to underpin this number is lacking.

Conclusions: This study discriminates between characteristics and causes of poor performance. Characteristics of poor performance are related to individual physician aspects. Causes contributing to the onset and continuation of poor performance include not only individual components but also work environment and professional development. Our findings therefore underscore the importance of considering poor performance on a system level rather than as a pure individual physician issue.

In spite of its top ranking in the Euro Canada Health Consumer Index,^{1,2} the Dutch health care system also has its share of professional high-stake misconduct cases in the media, focusing public and policy attention on patient safety and putting the subject of physician performance emphatic in the spotlight of both the public and the medical community. The impact of poor performance is profound and extends from

the actual harm done to the patient (first victim), the emotional distress of the physician or team involved (the second victim), the negative effect on the health care facility (third victim), to undermining society's trust in the health care system.³ Internationally, a variety of definitions have been used to describe poor performance (Table 1).⁴⁻⁸ In this study, the operational definition, published by the Royal Dutch Medical Association, is followed, defining poor performance as a situation in which (i) a pattern of poor quality of care exists, (ii) patients are harmed or at risk of being harmed, and (iii) the concerning physician is unable or unwilling to deal with the situation himself or herself.^{6,7} Although the relevance of physicians' poor performance is undisputed, research addressing the subject is still scant, presumably because of the sensitivity of the subject.^{9,10} The amount of attention that this topic has received in the media suggests it to be a large-scale issue. In the Netherlands, the most recent study reports 970 preventable adverse events in hospitals per year.¹¹ It is plausible that poor physician performance may be accountable for a number of these adverse events.

Performance problems seem to be of multifactorial origin,^{9,10,12} including features related to the individual physician, his or her work environment, and degree of professional development.¹²⁻¹⁴ On the individual level, elements such as physical and mental health, behavior, and competence are mentioned in previous research.¹⁵⁻²⁰ The influence of the work environment is described in the literature focusing on high-stake poor physician performance cases, showing common causes such as a culture of secrecy and protectionism, failing management systems, and incompetent leadership.

^{9,10,21} The importance of professional development is reflected by research linking professional behavior and professional attitude.²²⁻²⁴ Thus, diverse conditions seem to be influential in either improving or declining the performance level of the individual physician (Fig. 1), which can eventually lead to a situation of poor performance. Determining the prevalence of poor performance seems complicated.

In the international literature, prevalence rates vary from 0.5% to 12%, depending on the method of identification as well as the definition used.^{9,13,25,26} In previous research, 'characteristics' and 'causes' seem to be used synonymously in addressing poor performance and do not seem to be considered as separate elements. Causes of poor performance have been predominantly described using individual-related aspects such as burnout, lack of (social) skills, or substance use.^{9,13,20} Within the work environment, poor management systems, disregarded warning signals, and protectionism have been mentioned as causes in major failure cases.^{10,16,21} In the Netherlands, the Dutch Health Care Inspectorate entrusted an inventory of the extent of poor performance in 1994, resulting in a prevalence rate of 0.9%.¹³ To update and broaden their view on poor performance, the Health Care Inspectorate issued new research in 2013. The results of this study were taken into account in tuning their current policy.²⁵ The aim of this study was to describe (i) characteristics of poor performance, (ii) causes contributing to the onset and continuation of poor performance, and (iii) the prevalence of poor performance among physicians in the Netherlands. We considered characteristics to be the actual features of poor performance, causes to be the triggers that could possibly evoke these characteristics, and prevalence to be the frequency of occurrence.

[TABLE 1]

METHODS

Study Design

Because the literature addressing poor performance is still scant, it could be expected that relying solely on the literature to contribute to the aim of our study would not be sufficient. Therefore, in addition to conducting a literature review, we added a review of disciplinary law verdicts and expert interviews, to provide as much information as possible on characteristics, causes, and prevalence of poor performance.

Literature Review

The primary data sources for the literature review were electronic databases PubMed, CINAHL, Sociological Abstracts, Cochrane Library, Social Science Network, NIVEL catalogue, Driver, Picarta, Oaister, and Narcis. Databases were searched from the period 2002 to 2012, whereby physicians of all specialties (practicing in the Netherlands) were included. The search terms included professional misconduct, physicians/legislation and jurisprudence, problem doctors, disruptive behavior, poorly performing doctors, dysfunctional physicians, and unprofessional behavior. Articles included reviewed definition, characteristics, extent, cause, and/or consequences of poor performance. Titles were independently reviewed by 2 researchers to judge their relevance.

Abstracts of selected articles were reviewed based on the formulated inclusion and exclusion criteria. Finally, the full text of selected articles was read to determine ultimate inclusion. Differences in opinion were discussed between the researchers until consensus was reached.

Review of Disciplinary Law Verdicts

Under Dutch law, disciplinary complaints are judged according to medical professionalism guidelines laid down in the Medical Professionalism Manifesto.²⁷ Therefore, disciplinary rulings can be expected to hold relevant information on the subject of poor performance. We examined published disciplinary verdicts of Regional Disciplinary Boards from 2010 to mid-2012. Given that accurate accessibility of these was only available since 2010, we used a restricted period of 2010 to 2012. Feasibility required inclusion of only 25 most recent verdicts. These verdicts were reviewed based on the main elements of the definition of poor performance as described by the Royal Dutch Medical Association.^{6,7} Information regarding characteristics and causes of poor performance were extracted from each verdict and described per case.

Expert Interviews

To provide more in-depth information on the subject of poor performance, we consulted people who are professionally engaged in preventing, signaling, mediating, or solving issues of poor physician performance in the period from May to August 2012. We purposefully invited people from different backgrounds and professional perspectives, including 5 (former) physicians with additional experience in either management or training and education, 3 law professionals, and 4 professionals with a (quality) management background including a chairman of a hospital board. In addition, the researchers used input from their own extended networks to evaluate whether all angles of incidence were reviewed. The previously mentioned 12 experts

were approached, and all agreed to participate. A protocol was available to guide the semistructured interviews. Categories included professional expertise, concept exploration, estimated prevalence, knowledge of characteristics of poor performance, and causes contributing to the onset and/or continuation of poor performance. The interviews were audio recorded and analyzed by coding, using templates of categories of characteristics, causes, and extent. Results were reviewed and discussed within the research group.

[FIGURE 2]

RESULTS

The variety and combination of the 3 methods used contributed to the comprehension of characteristics, causes, and extent of poor performance.

Characteristics of Poor Performance

Literature review with reference to poor physician performance in the Netherlands produced 2869 hits. After focusing on publications in the Netherlands during 2002 to 2012 and deduplication, 1064 articles remained. Selection based on title and abstract resulted in 66 publications, of which 28 articles were eventually included in the description of the results (Supplementary File 1, Supplemental Digital Content 1, <http://links.lww.com/JPS/A27>).

Articles included medical file research, surveys, literature review, disciplinary file research, and adverse event discussions (Supplementary File 2, Supplemental Digital Content 2, <http://links.lww.com/JPS/A28>).

Studies showed that characteristics of poor performance were predominantly expressed by incorrect evaluation or treatment^{15,28-35} and, to a lesser extent, poor social interaction and inappropriate behavior^{36,37} (Table 2).

Review of disciplinary law verdicts indicates 15 of the 25 examined disciplinary law verdicts against physicians relating to incorrect treatment or diagnosis, including incorrect record keeping (Table 3). Inappropriate behavior occurred more frequently in the group of general practitioners (20%) compared with other specialists (4%).

Expert interviews were conducted with 12 professionals, after which saturation was reached. In their opinion, poor performance can be related to the 7 roles as defined by the CanMEDS (the Canadian Medical Education Directives for Specialists), namely, medical expert, scholar, communicator, professional, collaborator, manager, and health advocate. In their opinion, characteristics of poor performance hold aspects such as denial in keeping medical records accurate and up to date, not keeping up registrations, poor transfer of patient information during shifts, not being available or not showing up when needed, and nonresponsiveness regarding agreements (Table 2).

Causes of Poor Performance

Literature review points out the following causes contributing to the onset and continuation of poor performance: collaboration/ communication problems among physicians and/or among physicians and the hospital board,^{11,38-40} insufficient intervention from physician groups or the medical board with reference to poor performance,⁴¹ lack of opportunities for adequate peer evaluation,⁴² as well as

personal problems such as depression/addiction/burnout and working on a solitary basis⁴³⁻⁴⁶ (Table 2).

Review of disciplinary law verdicts indicated inadequate anamnesis or physical examination, refusing to consult a patient, or poor communication with patients or family as causes of poor performance.

Not being able or not taking the time to adequately inform patients about what they can expect or refusing to keep patient files correct and up to date also resulted in disciplinary verdicts.

In the opinion of the interviewed experts, causes of poor performance could be divided into aspects related to the individual, the work environment, and (lack of) professionalism.

Personal aspects include an absence of critical self-reflection.

Nonreceptiveness regarding feedback from the professional environment is a significant component in both onset and continuation of poor performance. The reverse situation, over self-criticism, poses an increased risk of burnout, which can also subsequently cause poor performance. Both physical and mental illnesses (depression, burn-out, addiction) are risk-enhancing triggers.

Regarding the work environment, a specific and strong professional hospital culture is, in the experts' view, a significant aspect in both the onset and continuation of poor performance.

Particularly lack of criticism, poor collaboration and communication, and lack of addressing underperformance by peers were mentioned. The indistinct legal context of poor performance, lack of management leadership, and perceived distance between “the blunt end” –that is, where policies/regulations and incentives are generated–and the frontline, were mentioned as contributors to the continuation of poor performance.

Lack of postgraduate professional development is another cause in the onset and continuation of poor performance. In the experts' opinion, postgraduate professionalization is generally limited to technical aspects rather than focusing on professional values and performance.

Experts stated that poor performance mostly occurs as an interplay of the individual physician and the context in which he or she performs.

Prevalence of Poor Performance

The reviewed literature could not provide an estimated prevalence rate of poor performance. The literature shows the type of physicians' actions that lead to complaints but it does not contain enough information to label poor performance. Specifically, the element of “a pattern” as posed in the Royal Dutch Medical Association's definition could not be judged.

Review of disciplinary law verdicts also lacked information about recurrence of a situation as well as information about objectionable behavior. Therefore, they cannot be labeled as “poor performance” according to the Royal Dutch Medical Association's definition. The only exceptions were cases concerning inappropriate sexual related behavior; the gravity of such behavior is regarded poor performance, even if it only happens once.

The interviewed experts are not aware of an exact rate of poor performance.

According to them, the often mentioned prevalence of 5% seems to be an adequate

estimation. In their view, there is no evidence of an increase in underperformance during the last 20 years.

DISCUSSION

Main Findings

This study explored characteristics, causes, and prevalence of poor performance using literature review, review of disciplinary law verdicts, and expert interviews (Table 2).

Characteristics of poor performance are described, by all 3 methods, on individual physician level with topics such as inadequate evaluation; diagnosis or treatment, including poor record keeping; and poor communication skills or inappropriate behavior.

Causes contributing to the onset and continuation of poor performance include cultural, organizational, and professionalism aspects; lack of addressing poor performance, insufficient intervention from medical or hospital board, and lack of postgraduate professional development are of importance.

[TABLE 2]

The extent of poor performance could not be captured in a prevalence rate. The often mentioned prevalence of 5% seems to be an adequate estimate in the experts' opinion.

Explanation of the Findings

Our findings describe characteristics of poor performance mostly on the individual physician level with topics including deficit in knowledge and skills and inappropriate behavior (Fig. 1).

These findings echo the international literature addressing complaints such as deficits in clinical care and communication^{17,47,48}; disruptive behavior including angry outbursts, verbal threats, and unwanted physical contact²⁰; and professional misconduct such as sexual misconduct and inappropriate medical care.^{16,17,49,50} To our knowledge, no studies so far differentiated explicitly between characteristics and causes of poor performance. Emphasis on the individual aspects regarding characteristics of poor performance could possibly be explained by the focus of the Dutch definition.

A challenging aspect in this definition is the fact that, to be considered a poor performer, a physician has to meet all 3 elements of the definition as follows: (i) pattern of poor quality of care, (ii) risk of patient harm, and (iii) unwillingness or inability to solve the problem. The broader American and British definitions contain additional elements such as potential risk to patient safety or to the effective running of a clinical team⁴ and lacking the qualities to perform effectively in the scope of the physician's practice^{5,8,51} (Table 1). In their recent policy statements, the Dutch regulatory bodies have focused on performance improvement and prevention of poor performance.^{25,52} As a result, the Dutch Health Care Inspectorate has recently extended its definition of poor performance to include issues such as collaboration and communication more emphatically.⁵³

[table 3]

Although characteristics of poor performance are captured on the individual physician level, our study suggests that causes contributing to the onset and

continuation of poor performance also include organizational and cultural aspects as well as aspects related to professional development. In our study, expert interviews contained the most in-depth information on causes of poor performance. Elements that were described as causes of poor performance also led to its (often long-standing) continuation. This study gives ample support for the finding that poor performance almost always seems to occur as an interplay of an individual and his or her professional context, that is, collaboration with the physician group, medical staff, and hospital board. This resonates with the international literature labeling elements such as poor management systems, barriers to disclose and investigate, conflicts and confusion from the “blunt to sharp end,” and communication or collaboration problems of importance concerning the onset of major failures.^{10,12,21,48,54,55} Surprisingly similar features of major failures exist in different countries—including the Netherlands—such as long incubation periods during which warning signs were discounted, a culture of secrecy, protectionism, and denial of uncomfortable information.

^{10,16,21} It is remarkable that causes and characteristics are similar in different countries with varying health care organization and funding. This may suggest that causes contributing to the onset and continuation of poor performance are deeply embedded in the system, culture, and behavior of clinical practice and the health care profession.^{10,20,21} An unanticipated result was the influence of (lack of) professional development on the onset and continuation of poor performance as indicated by the experts in our study. This outcome seems to be in line with reports expressing continuous investment in lifelong learning of competence and skills as well professional values as essential in resolving issues of poor performance.^{51,52,56-58} The professionalism literature underpins the importance of the role of professional behavior in detecting or reporting incompetent physicians.^{24,59,60} Conclusively, when talking about poor performance, a focus broader than just the individual physician could be considered.

Unraveling the exact prevalence of poor performance seems to be complicated. Internationally, the extent of poor physician performance is predominantly based on estimations,²⁶ echoing the reported estimated prevalence rate of 5% by the interviewed experts in this study. Both the literature review and the review of disciplinary law verdicts lacked sufficient information to estimate a prevalence rate. The international estimated rates vary ranging from 0.5% to 12%.^{9,13,18,20,26,61} One of the main reasons for the complexity to estimate the extent of poor performance is the absence of a generally accepted operational definition.²⁶ In the Netherlands, an operational definition is available, suggesting that it should be easier to extract a more exact prevalence. This study however did not meet that expectation. It is conceivable that, besides the existence of an operational definition, actual measurement of poor performance could contribute in acquiring a prevalence rate.

Strengths and Limitations of the Study

The sample of analyzed disciplinary law verdicts was relatively small, the wide variety of analyzed problems from the literature review and law verdicts could only be divided into broad categories, and it was not possible to extrapolate a prevalence rate.

Nevertheless, because of the diverse perspectives that were taken into account, the results do provide a broad view on poor performance in the Netherlands.

Furthermore, the study produces a distinct discrimination between its characteristics and causes.

Implications for Policy and Research

To prevent possible patient harm caused by poor performance, focus should be on early identification and prevention of suboptimal performance or first stages of poor performance. Recommendations could include a focus on performance improvement by creating a culture of speaking up, blame-free discussion of performance concerns, and continuous striving for excellence.

The use of performance assessments, preferably individual and group oriented, could be instrumental to creating such a culture.

We feel that improvement strategies resulting from these assessments should not be without consequences. In addition, in postgraduate medical education, professional development could be emphasized, paying special attention to items such as professional values, self-reflection, feedback, empathy, and professional accountability.

Further research concerning early warning signs of poor performance could contribute to its prevention.

CONCLUSIONS

Poor physician performance has a profound impact on patient safety and society's trust in the health care system. Despite the media spotlight on and concerns of patient safety, the exact frequency of actual poor physician performance is not yet clear. Deficit in individual physician knowledge and skills as well as inappropriate behavior is described as characteristics of poor performance. Causes contributing to the onset and continuation of poor performance go beyond the individual physician. They encompass work environmental aspects and (lack of) professional development. Therefore, it seems important to also consider the topic of poor performance on a system level rather than solely as an individual issue.

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TABLES AND FIGURES

TABLE 1. Overview of Various Definitions Regarding Poor/Substandard Performance

Authoritative Source	Definition
Royal Dutch Medical Association (the Netherlands)	Poor performance is a pattern of poor quality of care, in which a patient is harmed or at risk of being harmed and whereby the concerning physician is not able or willing to solve the problem himself or herself.
Federation of State Medical Boards (United States)	“Incompetence” means lacking the requisite abilities and qualities (cognitive, noncognitive, and communicative) to perform effectively in the scope of the physician’s practice.
Federation of State Medical Boards (United States)	“Dyscompetence” means failing to maintain acceptable standards of one or more areas of professional physician practice.
General Medical Council (United Kingdom)	A poorly performing doctor is a physician whose competence, conduct, or behavior poses a potential risk to patient safety or to the effective running of a clinical team.
General Medical Council (United Kingdom)	Performance concern: a concern about a doctor’s practice can be said to have arisen where an incident causes or has the potential to cause harm to a patient, staff, or the organization or where the doctor develops a pattern of repeating mistakes or seems to behave persistently in a manner inconsistent with the standards described in <i>Good Medical Practice</i> .

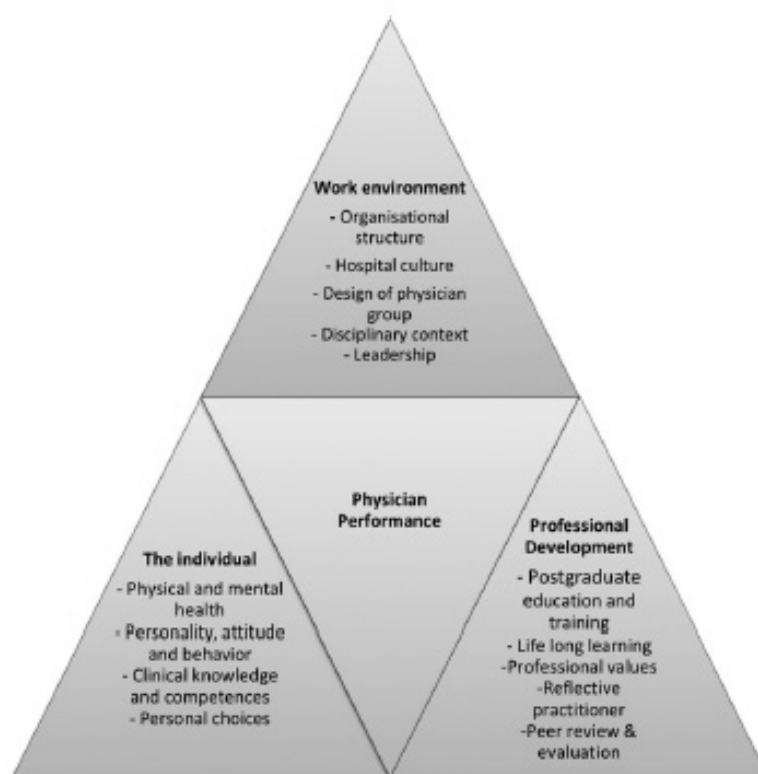


FIGURE 1. Performance triangle; conditions that can influence the performance level of the individual physician.

TABLE 2. Overview of Characteristics, Causes, and Prevalence of Poor Performance

Study Element	Characteristics	Cause	Prevalence
Literature review	<ul style="list-style-type: none"> • Incorrect evaluation 	<ul style="list-style-type: none"> • Imperfect collaboration/communication between professionals 	Literature did not contain enough information to label poor performance according to the definition of the Royal Dutch Medical Association.
	<ul style="list-style-type: none"> • Incorrect treatment • Poor communication skills • Inappropriate behavior 	<ul style="list-style-type: none"> • Insufficient intervention from group/medical board • Impaired peer evaluation • Personal problems: <ul style="list-style-type: none"> - Depression - Burnout - Addiction • Working solitary 	In the international literature, prevalence rates vary from 0.5% to 12%
Disciplinary law verdict review	<ul style="list-style-type: none"> • Incorrect diagnosis 	<ul style="list-style-type: none"> • Inadequate information 	Disciplinary law verdicts could not label poor performance according to the definition of the Royal Dutch Medical Association.
	<ul style="list-style-type: none"> • Incorrect treatment • Inadequate record keeping • Inappropriate behavior 	<ul style="list-style-type: none"> • Inadequate anamnesis • Poor communication • Inadequate record keeping • No show 	Law verdicts lacked information about recurrence of a situation and information about objectionable behavior
Expert interview	<ul style="list-style-type: none"> • Medical-technical • Poor shift transfer • Inadequate record keeping/registration • Unattainability • Nonresponsiveness regarding agreements 	<p>Personal aspects:</p> <ul style="list-style-type: none"> - Poor self-reflection - Nonresponsiveness to feedback - Burnout - Depression - Addiction <p>Work environment aspects:</p> <ul style="list-style-type: none"> - Poor collaboration and communication - Lack of criticism - Lack of addressing underperformance - Insufficient leadership - Insufficient responsibility hospital board - Distance between “blunt end” and frontline - Indistinct legal context <p>Professional development aspects:</p> <ul style="list-style-type: none"> - Lack of postgraduate professional development - Lack of peer review an evaluation - Lack of reflection in general 	The often mentioned 5% seemed an adequate estimation according to the experts

TABLE 3. Review of Disciplinary law Verdicts

Disciplinary Law Verdicts	Medical Specialist, n = 25 verdicts	General Practitioner, n = 25 verdicts
Inappropriate behavior	1	5
Incorrect diagnosis/treatment	15	11
Insufficient care	1	2
Violation of professional secrecy	0	4
Incorrect statement or arrest	5	1
Late referral	0	2
Remaining complaints	3	0