The Effect of Care Quality by Managing the Institute of Anatomy Pathology in Kosovo

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Abstract

Background: The management of the Institute of Pathological Anatomy in Kosovo is the only institution providing tertiary diagnostic services for the population of Kosovo. In the diagnosis and treatment of patients in the IPA, the priority is to manage the quality and accuracy of the diagnostic results. The IPA mission is to improve workflow management, reduce diagnostic errors, increase speed and diagnose quality. **Purpose:** The purpose of this study is to identify the effect of quality of care diagnostic services in IPA and to assess to the management of IPA to change the factors that have affected the management of the institution so far. These factors relate to centralization, lack of autonomy, lack of financial resources for facility maintenance, lack of modern diagnostic equipment, lack of clinical specialties, lack of medical reagents, lack of clinical protocols. Bureaucratic hacks designed by health policy makers in Kosovo have influenced the progress of the IPA, so slowly to date. **Method:** With a random sampling, 250 patients with different health problems (tumors) were recruited into the IPA for the period January 2018. The average age of participating subjects (n=250) by random sampling was 56.6 ± 11.6 years, where age group the youngest of patients ranging from 20 to 35 years old, which accounts for 6, 40% of the total number of patients diagnosed, the age group 36-50 is 32.80%, the age group of 51-65 years old 42% and the age group> 65 years old represents 18.80% of the total number of patients diagnosed in IPA. **Results:** The abstract concludes with a list of evidences facing the public IPA in Kosovo. IPA's management role is a new approach, important to Kosovo and the health of its population. Increasing and timely provision of patient diagnosis is the achievement of institution management and the advancement of diagnostic quality of examinations in this institution. The evidence, that collaboration between IPA's internal and external clinicians and the use of advanced technology will significantly increase the patient's diagnostic activity. Finding outcomes will have a

theoretical and practical impact on improving IPA work by recommending a research with some key findings for IPA management.

Keywords: Kosovo, Institution Anatomy Pathology, management, diagnostic services, quality of diagnosis, clinical practices

Introduction

Management of patient diagnosis methods and processes according to their morbidity is one of the challenges of pathologists of the Institution of Pathological Anatomy in Kosovo. In a country like Kosovo, with scarce health investments, the need to manage available IPA sources is urgent to advance the quality of timely diagnosis of patients, as this is the only diagnostic institution that plays an important role in preventing and treatment of cancer diseases in Kosovo. As the tumor diseases in Kosovo in the post-war period are increasing as a result of many factors, the role of IPA management plays a major role in the diagnosis of examinations. Laboratory memory for pathologists covers all aspects of the administration of the pathological and anatomical laboratory. In a practical approach, this abstract will provide basic principles and management tools for the practice of pathology and laboratory medicine. The Institute of Anatomy Pathology, in Pristina, is the unique institution of Kosovo that provides services to all citizens of Kosovo while trying to use contemporary methods of the examinative and diagnostic clinic. IPA is the only one public institution of tertiary level in Kosovo that provides diagnostic services for the entire population of Kosovo. Histopathological, immunohistochemical, histochemical, cytological, and clinical autopsy are performed at this institution. In the diagnosis and treatment of patients the priority of the work is the quality and accuracy of histopathological results. This process is achieved through the incorporation of the quality system, the management of laboratory personnel, the use of advanced technology, the management of interprofessional cooperation. Possible diagnostic advantages in IPA, Pristina include (i) providing earlier and more accurate diagnostic methods; (ii) providing accurate information about the disease that will decide on the treatment of the patient; (iii) improving further treatment in patients; (iv) reducing the occurrence of side effects by unnecessary treatments; (v) providing the best tools for diagnosis; (vi) patient monitoring; (vii) improving patient outcomes.

Institute of Pathological Anatomy (IPA) in Kosovo

At the IPA institution currently work about 40 employees as general staff and the rest are categorized according to health specialties, out of which 22 are pathologist's specialists, 1 specialist cytologists, 10 specialized midwifery specialists, 5 specialists, 2 administrators. Anatomopathologists at IPA in Pristina are the only diagnostic doctors in Kosovo that provide critical information and consultation on patient health problems, such as counseling on patient diagnostic testing, tracking test results for a patient's treatment and treating patient, and so on. Despite the roles that laboratory

medicine, anatomical pathology and medical image play in diagnosis, anatomopathologists are not considered supportive services. Laboratory Association experts pIPAnt out that anatomopathologists are not adequately engaged in the diagnostic process and that better co-operation is needed between all members of their diagnostic and medical team (Allen and Thoraarth, 2014; Kroft, 2014). IPA should facilitate and support co-operation between doctors and clinicians in Kosovo for diagnosing and treating patients in time. This collaboration manages the entire testing process, including delegating the order for testing, analysis, interpretation, reporting, communication of results, and making subsequent patient decisions.

The Laboratory (IPA) diagnostic activities

Over a year at the IPA, there are about 12,000 biopsy examinations of various specialties, where approximately 50% of them are examinations of tumor pathologies. Immunohistochemical examinations are carried out in this institution. Being the only tertiary and unique diagnostic center for Kosovo, the institution manages all the difficult consultations that come from the regions and municipalities of Kosovo. The institution is a reference pIPAnt for all doctors in Kosovo. IPA analyzes come institutionalally through various clinics and health institutions in Kosovo. There are cases when patients appear on an individual route at the IPA. The IPA institutionally collaborates with seven regional hospitals of Kosovo, namely Peja Hospital, Prizren Hospital, Mitrovica Hospital, Gjilan Hospital, Vushtrri Hospital, and Gjakova Hospital. It is worth mentioning that IPA institutional cooperation has and with private clinics in Kosovo. Each year about 12,500 patients are screened for histopathological, immunohistochemical, cytological and clinical autopsy tests. In IPA, in Prishtina, due to the management and dependence of this institution from UCCK and the Ministry of Health, there are some important factors that affect the daily work and management of IPA activity. Some of the factors that have hampered and continue to hamper qualitative and quantitative work in the IPA are related to (i) the bureaucracy highlighted by policymaking structures in Kosovo; (ii) centralizing the IPA; (iii) lack of financial support; (iv) lack of modern diagnostic equipment; (v) lack of clinical specialties; (vi) lack of timely supply of medical reagents; (vii) lack of coordination and cooperation of work with other institutions outside of Kosovo; (ix) lack of facility and infrastructure maintenance.

Research Methodology

The conduction of the survey took place during January - March of 2018. With a random sampling, 250 patients were diagnosed at the IPA Institution in Prishtina. The average age of the participating subjects was 56.6 ± 11.6 years. The youngest age group of 20-35 years old accounts for 6.40% of the total number of patients diagnosed, the age group 36-50 is 32.80%, age group 51-65 years 42% and age group> 65 years 18.80% of the total number of patients diagnosed in IPA. In primary school there were (n=81 or 32.40%), with high school (n=118 or 47.20%), faculty (n=37 or 14.80%) and postgraduate studies (n=14 or 5.60%). Of the rural settlements

were (n=154 or 62%), of urban settlements (n=96 or 38%) of diagnosed patients. Employed, (n=176 or 70.40%) of patients, unemployed (n=30 or 12%) and retired (n=44 or 7.60%).

The distribution of patients diagnosed and treated with medication according to the duration of the disease from their diagnosis results from 1 to 5 years (n=140 or 56%), 6-10 years (n=45 or 18%) of 11-15 years (n=49 or 19.6%) and with a duration of 16-20 years (n=16 or 6.4%) patients. From the results of the disease we come to the conclusion that we have the existence of an increased incidence of cancer in Kosovo. This is worrying and critical for the life of the Kosovo population, but alarming to find the factors that have affected it. For this, the factors for spreading tumor diseases in Kosovo should be studied. Clinicians and doctors have to worry and increase the education of the population through the promotion of public health. Since timely disease prevention and early-stage testing will significantly reduce the risk to the patient's life. Collaboration with specialist doctors and family centers should be among the working criteria of doctors of the diagnostic laboratory for cancer disease in Pristina. This indicator paves the way for organizing work in the IPA, installing the digital medical technology at IPA for the first time. The registration of morbidity in electronic records would create a database of morbidity data that would be accurate and would process morbidity data more quickly, more accurately, more easily, reliably and errorlessly. This will create an electronic register according to the incidence of the disease, its prevalence for the first time, domestically for the Republic of Kosovo. The use of tumor drugs for this category of patients would be an indication of the degree of disease distribution in rural areas of Kosovo. Collaboration between levels of health care should be more present in cases of these diseases in order to reduce the illness timely prevention.

Results

Outcomes regarding the question of how long the subjects were expected to receive the response to their diagnosis responded that (n=28 or 11.20%) received the score within a week. While, (n=54 or 21.60%) of IPA out that their score has been ready for two weeks. While a set of subjects (n=69 or 27.6%) have resulted that their response has been ready for three weeks. While a group of subjects of (n=84 or 33.6%) resulted that the response to their examination was obtained after a month of sample testing. We conclude that the time of one month (n=84 or 33.60%) of the interviewed subjects is a very long period of receipt of the response from the patient diagnosed with tumor disease. The delay in receiving the response from the patient seems to be related to some internal and external IPA management phases. Delaying factors are inter-institutional interaction factors as a considerable number of tests are referred to outside the Laboratory with delays in submitting and completing the relevant documentation. Another factor is the use of devices already consumed in the IPA, which requires their replacement with the newest advanced technology. Another factor is the lack of reagents for certain and difficult examinations. Regarding the

question of how subjects / patients are referenced in IPA, we conclude that (n=163 or 65.2%) of them are referred by a specialist (ongologist) or other specialty to carry out this examination. While (n=87 or 34.8%) of them have been referred to by another hospital of Kosovo municipalities.) In our case, two UCCK and Peja hospital have been selected. a high variation and referral of paclitaxes is an indicator that reflects the reality of unique cancer screening in Kosovo's health care since the IPA is the only tumor diagnostic center in the country. As such, health actors should look at the possibility of timely transportation with appropriate tools, investing in equipment for the ubiquitous progression of IPA diagnostic procedures. When asked whether they have received the right information for the diagnosis of their illness, the responses provided reflect that their (n=98 or 39.2%) have knowledge of the diagnosis of their illness. While (n=79 or 31.6%) of the samples have no knowledge of the diagnosis of their disease. While (n=37 or 14.8%) of patients very little knows about their illness and only (n=36 or 14.40%) are waiting for a response from a specialist doctor. The results of the aforementioned question tell us that very little information is provided by patients about tumor illnesses, perhaps still in Kosovo is a taboo open patient talk to inform and inform him and his family about the condition of the patient, the risks of the disease and everything else that is related to the progress of the disease, as by assessing the rights-based card (WHO, 2008), all patients enjoy the right to information about their disease. It is therefore a duty of specialist doctors and clinicians to talk openly with their patients by informing them of the morbidity and its subsequent consequences. As to how many doctors have provided explanations about the disease, how clear they were in their explanations, how understandable why this patient diagnosed was required, the subjects responded that only (n=58 or 23.2%) and (n=76 or 30.4%) did not understand the information provided by the physician, (n=69 or 27.6%) had the impression that their physician was reserved and only (n=47 or 18.8%) of patients were told that they had talked to their relatives with their doctor because they were not in a state of health to understand the doctor. From the answers given, it is clear that in most cases doctors are not understood by the patients because they are emotionally burdened, the disease feels tired, and even more so that this is a very serious illness to be calmly welcomed by the subjects of the health institution. The doctors themselves in most cases, considering some of the characteristics of the patient or the disease, respect the subject by accepting to communicate with their closest family members about the illness of their patients. Asked whether patients believed that they were adequately advised by IPA staff, our subjects responded that only (n=103 or 41.2% are very satisfied by the IPA staff for communicating with them, whereas only (n=115 or 46%) of the participants were well advised by the staff and only a small number of samples of about (n=32 or 12.8%) of the subjects result to be somewhat satisfied by the advice received from the IPA staff. From the results of this work we come to the conclusion that the professionalism, the way of treatment and communication by the IPA staff with its patients is at the right levels. Although we think it should be done in the communication section as the psychological severity of the patients is a difficult role

for the clinician. Looking at the IPA structure and structure, the lack of a social specialty doctor at IPA is supposed to be part of the organization. 81 subjects (IPA employees) are participants on the frequency and percentage of health care workers who are considered as inclusive in the outcome of the diagnostic test work, from where employee variables related to advancing the quality of diagnostic services is the cause of professional growth of employees; working conditions at the IAI institution; factors of improving the role of the IPA management; a factor influencing the advancement of quality is the use and investment in new professional innovations. In the answer to the question, where do you think the IPA staff should invest the laboratory manager for the professional growth of the IPA staff, the subjects (n=65 or 78.31%) think that the organization of ongIPAng training is a staff request, while (n=12 or 14.46% of employees think that participation in scientific conferences at home and abroad is an investment that should be carried out by management in the future and (n=4 or 4.82%) of respondents think that inter-institutional co-operation are part of their professional growth. These results should be seen as part of staff training management and professional growth, which are factors that enhance the patient's quality diagnostic advancement. When asked what they think should be different from working conditions in the Pristina laboratory, the subjects stated that (n=25 or 30.12%) of the subjects think that the current infrastructure in the IPA should change, while (n=19 or 22.89%) of the subjects said that the change of old equipment in the lab would change their working conditions. But not only does it change the conditions at work, but this factor also relates to the other elements of diagnostic quality that is quality, accuracy, speed, ease and timely result. While a subject of (n=23 or 27.71%) of participants think that financial support and autonomy of the Laboratory will change their working conditions in the future. In this result we have to emphasize that so far the IPA is budgeted with a historical budget by the Ministry of Health in dependence of UCCK. This dependence has created some shortcomings that have been highlighted and the presentation of work in the IPA. However, the responses received from our subjects reinforce the importance of the budget or financial management factor related to the granting of autonomy and the IPA being a unique institution in Kosovo. While (n=8 or 9.64%) think they should change the co-operation they have with outside doctors, as delays in test results depend on the cooperation they have between them. Time, transport, lack of information, lack of a computerized on-line laboratory program among doctors, laboratory clinicians to regenerate patient data in real time creates a gap in the IAP diagnostic process. While only (n=6 or 7,23%) of the employee subjects think that the provision of laboratory reagents at the right time is what needs to be changed in terms of working conditions in the IPA. The question of what the employees' subjects think is to improve their role in IPA management results from the responses given that only (n=14 or 16.87%) think that it should change the clinical work process, while (n=25 or 30,12%) think that staff training should change so the procedure followed so far is not enough and for this the employees disagree as they need more professional training. While (n=12 or 14.46%) think that the role of management should change

with regard to consultations with the staff. There is dissatisfaction in this regard as staff believes that management needs to be consulted more often with them. While a sample of (n=7 or 8.43%) participants think that LAB autonomy should be finally determined as this will change the work process, the IPA mission and its self-financing will IPA delays and mistakes harm to the quality of the diagnostic service. While a group of (n=9 or 10.84%) of employee entities think that decision-making along with staff is important in good management of IAP. A group of (n=6 or 7.23%) and a sample of (n=8 or 9.64%) think that institutional support and the establishment of new standards in research and testing are part of the IPA management. For this, investment in time and work from the management of the institution in cooperation with its employees is needed. When asked about what IPA employees are expecting new innovation from their management, responses and the analysis of the most important factors for them as the influencing variables in innovation or innovation for IPA, are expressed by the subjects that IPA investments are very important to change the look of IPA. With a sample (n=18 or 21.69%) of investment entities in new, modern and contemporary technology devices, but simultaneously with many auxiliary and qualitative factors in the work of the laboratory physician, is one of the novelties required. Another entity comprised of (n=16 or 19.28%) think that investment in infrastructure is part of the new IPA management innovation, with investment in infrastructure our subjects imply maintaining the current structure, painting it, change of doors, windows, main entrance gate to IPA, as the main door of the unique public diagnosis in Kosovo and so on. Also with a subject of (n=18 or 21.69%), the samples emphasize the importance of cleanliness and maintaining the environment of their work in Kosovo's public institutions. Bearing in mind the aggravating factor of the psychological state of the patients who come to the IPA at the last stages of their life, the conditions of cleanliness, order, maintenance of the sitting room, regulated and clean rooms of the patients and the staff are the conditions minimum requirement that an institution such as the IAP should enjoy in Kosovo. Another issue that has been seen as innovation in the IPAK is that the necessary supplies in time at the institution with this by the subjects (n=6 or 7,23%) have requested that there be no delays in supplies, planning management be carried out for a quantity the organization of public tenders should be a priority of the IPAK and be financed by the institution itself so as not to have any obstacles in the way that the status of reagents in IPA is not present. The new innovation is assessed by the subjects (n=14 or 16.87%) installing the new diagnostic technology at the IPA and only (n=9 or 10.84%) think that the innovation of change in the IPA management aspect is training modern-day staff on scientific research in diagnostics.

Discussion

The high frequency of personnel attendance rates, which is characterized by the percentage of IPA employees who are inclusive in tumor diagnostics, IPA to several factors that need to change and which relate to their (i) growth factor; (ii) their working conditions; (iii) improving the management's role in programming

purchases, financial budgeting, designing training programs, expanding scientific research, wider participation in scientific activities, etc. (iv) new innovations in employee work; (v) the use of contemporary equipment; (vi) comfortable environments for patients. The results of none of the aforementioned factors and the outcome of the IAP staff attitude are not behind the results of the study (Kavan M.G., 2014). The quality of laboratory care (Kavan, M.G., and E.J. Barone 2016) consists in the application of medical science and technology to find accurate patient diagnosis approach as well as to minimize diagnostic errors. The results show that IPA employees have already understood the importance and value of their diagnostic work. The timely and quality diagnostic service has become a priority for them, with the aim of achieving timely and error-free diagnosis, as they relate to a delicate work process for the Kosovo population. The quality of patient care is essentially determined by the quality of infrastructure (Seema Mehta, 2011), the quality of training, the personnel competencies and the efficiency of the healthcare system's operating systems is consistent with the findings of our results. In establishing a model of health management of diagnostic institutions, it is necessary to measure (Pai and Chary, 2012) (i) the quality of service provided to patients; (ii) their waiting time from the moment of sampling for diagnosis; (iii) the degree of diagnostic errors; (iv) timely treatment of the patient. The quality of diagnostic services is proved as the standard of a metered and evaluated service with other similar services that is accomplished when professionals are consistently qualified, cognitive and good user of diagnostic methods (Singh, H. 2013). Through our research we proposed to IPA management to review the possibility of employing a psychologist-sociologist, as a result of the hard work of clinicians in this institution.

Conclusion

Opinions regarding the current management of the institution, various absences and problems or attitudes of patients about the quality of the diagnoses they have received from this institution are the indicators of the IPA management role and its impact on the advancement of quality in diagnosis since (i) management plays an important role in patient outcome and diagnosis, in the quality of examinations and in the progress of the entire IPA process; (ii) there is a link between the institution's management and the professionalism of clinicians, their ongoing education, participation in scientific conferences on the very nature of professional and research work carried out at the IPA; (iii) there is room for improvement; (iv) the higher the use of modern technology, the longer the waiting time for the patient, the time of sample processing, and the quality of the diagnosis as well as the speed of patient treatment decrease. An effort to improve the functional aspect of IPA puts all responsible policy makers in Kosovo, for reviewing the Institution in the context of meeting its unique dimensions for the public diagnostic (IPA) health services in Kosovo.

Bibliography

[1] Berenson RA, Upadhyay DK, Kaye DR. Placing diagnosis errors on the policy agenda. Washington, DC: Urban Institute; 2014. May 22, 2015

[2] Berwick DM. Postgraduate education of physicians: Professional self-regulation and external accountability. JAMA. 2015;313(18):1803–1804.

[3] Betsy Lehman Center for Patient Safety and Medical Error Reduction. The public's views on medical error in Massachusetts. Cambridge, MA: Harvard School of Public Health; 2014.

[4] Cahalan S. Brain on fire. New York: Simon & Schuster; 2012.

[5] Chassin MR, Baker DW. Aiming higher to enhance professionalism: Beyond accreditation and certification. JAMA. 2015;313(18):1795–1796.

[6] Croskerry P. The importance of cognitive errors in diagnosis and strategies to minimize them. Academic Medicine. 2003;78(8):775–780.

[7] Croskerry P. Perspectives on diagnostic failure and patient safety. Healthcare Quarterly. 2012 April;15(Special issue):50–56.

[8] Dwyer J. An infection, unnoticed, turns unstoppable. The New York Times. 2012 July 11; December 5, 2014

[9] Gandhi TK, Kachalia A, Thomas EJ, Puopolo AL, Yoon C, Brennan TA, Studdert DM. Missed and delayed diagnoses in the ambulatory setting: A study of closed malpractice claims. Annals of Internal Medicine. 2006;145(7):488–496.

[10] Gawande A. Being mortal: Medicine and what matters in the end. New York: Metropolitan Books; 2014.

[11] Genzlinger N. A medical guessing game, with life as the ultimate prize. The New York Times. 2012 June 24

[12] Golodner L. How the public perceives patient safety. Newsletter of the National Patient Safety Foundation. 1997;1(1):1–4.

[13] Graber ML, Franklin N, Gordon R. Diagnostic error in internal medicine. Archives of Internal Medicine. 2005;165(13):1493–1499.

[14] Haskell HW. What's in a story? Lessons from patients who have suffered diagnostic failure. Diagnosis. 2014;1(1):53–54

[15] Hazen EP, McDougle CJ, Volkmar FR. Changes in the diagnostic criteria for autism in DSM-5: Controversies and concerns. Journal of Clinical Psychiatry. 2013;74(7):739–740.

[16] Holmboe ES, Durning SJ. Assessing clinical reasoning: Moving from in vitro to in vivo. Diagnosis. 2014;1(1):111–117. IOM (Institute of Medicine). To err is human: Building a safer health system. Washington, DC: National Academy Press; 2000.

[17] Isabel Healthcare. Misdiagnosis is an overlooked and growing patient safety issue and core mission of isabel healthcare. 2006.

[18] Josiah Macy Jr. Foundation and Carnegie Foundation for the Advancement of Teaching. Educating nurses and physicians: Towards new horizons. New York: Josiah Macy Jr. Foundation; 2010.

[19] Julavits H. Diagnose this! How to be your own best doctor. Harper's Magazine. 2014 April;:25–35.

[20] Kavan MG, Barone EJ. Grief and major depression—Controversy over changes in DSM-5 diagnostic criteria. American Family Physician. 2014;90(10):690–694

[21] Madara JL, Burkhart J. Professionalism, self-regulation, and motivation: How did health care get this so wrong? JAMA. 2015;313(18):1793–1794.

[22] Mechanic M. Atul Gawande: "We have medicalized aging, and that experiment is failing us." Mother Jones. 2014

[23] Newman-Toker D, Pronovost PJ. Diagnostic errors: The next frontier for patient safety. JAMA. 2009;301(10):1060–1062.

[24] Schiff GD, Leape LL. Commentary: How can we make diagnosis safer? Academic Medicine. 2012;87(2):135–138.

[25] Schiff GD, Kim S, Abrams R, Cosby K, Lambert B, Elstein AS, Hasler S, Krosnjar N, Odwazny R, Wisniewski MF, McNutt RA. Advances in patient safety: From research to implementation (Volume 2: Concepts and methodolgy).

[26] Henriksen K, Battles JB, Marks ES, Lewin DI, editors. Rockville, MD: Agency for Healthcare Research and Quality; 2005. pp. 255–278. (Diagnosing diagnosis errors: Lessons from a multi-institutional collaborative project). AHRQ Publication No: 05-0021

[27] Singh H. Diagnostic errors: Moving beyond "no respect" and getting ready for prime time. BMJ Quality & Safety. 2013;22(10):789–792.