Population administration service satisfaction in Lima Puluh Kota District, West Sumatera

Meironi*; Werry Darta Taifur; Nasri Bachtiar

Faculty of Economics, Andalas University, Padang, Indonesia

*To whom correspondence should be addressed. Email: roni_civilian@yahoo.com

Abstract
Assessment of public satisfaction with an agency's performance that organizes public services needs to be assessed by involving all service attributes because service attributes cannot stand alone, and performance improvement cannot be made separately. Assessment of service attributes is one way to track consumer ratings so that service providers can understand the causes of service problems. This study uses the Importance Performance Analysis (IPA) method. From this study, it was found that the priority that needs to be improved to improve public satisfaction with population administration services is to increase the discipline of officers in serving the community, certainty of service costs, and speed of service.

Keywords: Importance Performance Analysis, Population administration, Public satisfaction

JEL Classification: M15, O33, R58

INTRODUCTION
Improving the quality of public services is one of the government's main tasks, which is carried out through the bureaucratic process (Rasyid, 2000). As a legal standard to achieve the proclaimed quality of public services, Law Number 25 of 2009 concerning Public Services has been issued and has been followed up with Government Regulation Number 96 of 2012 concerning the implementation of Law Number 25 of 2009 concerning Public Services. Meanwhile, on the public side as consumers, the implementation of a modern bureaucracy that is responsive to the people's will and the current situation is seen as one aspect that can increase customer satisfaction (Febrianda, 2009). Therefore, the implementation of bureaucratic reform to improve the quality of public services needs to be monitored continuously with active participation from both parties, both organizers and consumers, so that the services provided are more responsive and accountable.

Population administration public services strongly correlate with the Indonesian state's character, which has a large population. Based on BPS projections, Indonesia's total population in 2019 is recorded at 268,074.6 thousand people, where approximately 34.67 percent of the population are residents aged 0-19 years (BPS, 2013). Records or data that record population dynamics as compiled in population administration products are crucial for their role in human development, one of the principles of national
development (BAPPENAS, 2009). Also, population administration deals with various aspects of life, such as law, taxation, general elections, recording land assets, assistance, buildings, permits, and development planning to provide education and health service facilities.

Therefore, the administration of bureaucracy in population administration must be carried out in an organized manner from the center to the regions to produce an accurate and up-to-date population database. The importance of improving the quality of population data is the basis for the government in issuing population administration policies through Law of the Republic of Indonesia Number 24 of 2013 concerning Amendments to Law Number 23 of 2006 concerning Population Administration. This law mandates the implementation of a comprehensive arrangement and control of population documents.

Although several rules and legal standards cover the implementation of the population administration bureaucracy to run in its corridors, it turns out that there are still some cases of population maladministration in various regions. The Indonesian Ombudsman announced that there were maladministration in the issuance of population documents, especially electronic identity cards, spread across 34 provinces in Indonesia (RI Ombudsman, 2017). Another problem related to population administration that is often found nationally is the Final Voter List (DPT) problem, which always occurs in every General Election (Prayudi, 2018).

The Indonesian Ombudsman representing West Sumattra in 2017 released 7 reports on population maladministration, where one of these reports occurred in Lima Puluh Kota District. The report stated that the public's complaints regarding the unclear time for completing the electronic identity cards did not receive service and follow-up from the Population and Civil Registry Office of Lima Puluh Kota District. (Haluan, 2016) revealed that there are people who deal with the Population and Civil Registry Office of the Lima Puluh Kota District complaining about the completion of services beyond the maximum 1-day time limit as determined and promised. In the context of public services, (Khadka & Maharjan, 2017) argues that the disruption of consumers' psychological side will reduce feelings of attachment and motivation to use services later.

Therefore, the low performance of service attributes related to the time aspect has the potential to hinder the Population and Civil Registry Office of Lima Puluh Kota District in achieving targets that require community participation, such as the coverage of residents who have population documents. This service attribute's low performance can be seen from the low achievement of the Minimum Service Standards (SPM) for the service performance of the Population and Civil Registry Service of Lima Puluh Kota in 2016. The coverage of the issuance of family cards (KK) is only 89.50 percent, and the coverage of the issuance of identity cards is 93.39 percent, which should have been 100 percent by 2015. Likewise, seen from the percentage of ownership of birth certificates for children aged 0-18 years, it was recorded that 74.26 percent has not reached 100 percent.

Although the various population administration phenomena that occur have created a negative stigma against the government, they reveal one of the good points of the current openness era. The public is slowly becoming more open in evaluating population administration service providers' performance to convey various media aspirations. Furthermore, various reports and satisfaction assessments continue to be contributed and published through various means and media. The consumer assessment needed includes perceptions of satisfaction and consumers' expectations of various service attributes' performance because the smaller the gap between expectations and satisfaction, the
higher the service quality (Wilson, Zeithaml, Bitner, & Gremler, 2016). Thus, the demand for improving the quality of population administration public services is necessary that cannot be postponed, starting from the lowest level to the highest in the central government. So it is necessary to research to analyze the policies needed to improve services and overcome problems found in the field.

From previous research, they were generally using Importance Performance Analysis (IPA), Community Satisfaction Index (IKK), and SWOT (Kamarni, 2011; Nugraheni, 2015; Syoyan, 2013; Retwando, 2015). This study's difference and previous research are the study's object and location and the analysis used. This research was conducted in Lima Puluh Kota District. The research object is the performance of population services using IPA analysis, correlation analysis, and IKK analysis in the management of Population Administration. Policy formulation is not only based on identifying priorities for improving service attributes through IPA but also assessing how strong the correlation between service attributes is to one another so that the improvement policy can consider linkages with other attributes. The IKK score is used as a guideline for how progressive performance improvement policies need to be implemented by the Population and Civil Registry Office of Lima Puluh Kota District.

METHODS
This study's population is the Lima Puluh Kota community who has taken care of population administration in the Population and Civil Registry Office in Lima Puluh Kota District during 2017. This study's population size is the total number of population documents issued by the Office of Population and Civil Registry of Lima Puluh Kota in 2017, amounting to 62,756 documents.

Determination of the number of samples in this study using the formula Taro Yamane (1967). Furthermore, the determination of sample allocation per district is calculated based on the proportional method. By using the sampling formula, the research sample allocation was obtained for all sub-districts in the Lima Puluh Kota District.

Furthermore, sampling was carried out in each district using a questionnaire. A questionnaire is a list of questions given to others willing to respond (respondents) according to user requests. The questionnaire used in this study is an open and closed questionnaire.

The process of collecting data through a questionnaire in the sub-district area began with a search for prospective respondents' identity recorded in the history of population administration affairs in 2017 at each Wali Nagari (Village) office. After the prospective respondent's identity is obtained, it is followed by a visit to the house or the prospective respondent's residence to be interviewed using a questionnaire. For a closed questionnaire, the Likert scale is used

Data were analyzed using the Importance Performance Analysis technique. This technique was first introduced by Martilla & James (1977). Importance Performance Analysis (IPA) is an analytical technique used to identify priority performance factors owned by an organization to meet service users' satisfaction (consumers).

According to Martilla & James (1977), IPA is an analysis that aims to determine the priority scale of improvement based on the results of measuring the performance of all observed service attributes. The IPA analysis is divided into two sub-analysis stages, namely:
1. Analysis of the level of conformity (TK)
This analysis aims to provide a priority score for improvements to all observed attributes based on the ratio between the level of satisfaction and the level of consumer expectations for each service attribute. The smaller the ratio between the expectations and satisfaction, the lower the priority order for the attribute improvement.

2. Quadrant analysis
This analysis aims to classify all service attributes ranked into four quadrants based on the average level of expectation and total satisfaction. By notating the level of expectation and satisfaction with an attribute with $h_i$ and $k_i$, and the average level of expectation and satisfaction with $\bar{h}$ and $\bar{k}$, the criteria for grouping attributes based on priority are as follows:

- $h_i > \bar{h}$ and $k_i < \bar{k}$: quadrant A (priority for improvement)
- $h_i > \bar{h}$ and $k_i < \bar{k}$: quadrant B (priority to maintain performance)
- $h_i < \bar{h}$ and $k_i < \bar{k}$: quadrant C (low priority)
- $h_i < \bar{h}$ and $k_i > \bar{k}$: quadrant D (not priority)

RESULTS AND DISCUSSION

Characteristics of respondents
Respondents were 107 people representing all consumers served at the Population and Civil Registry Office of Lima Puluh Kota in all Lima Puluh Kota districts in 2017. The respondents' composition was described according to some characteristics, including gender, education, employment, and age, as presented in Table 1.

Table 1. Characteristics of respondents

| Characteristics                              | Frequency | %    |
|----------------------------------------------|-----------|------|
| **Gender**                                   |           |      |
| Male                                         | 35        | 32.71|
| Female                                       | 72        | 67.29|
| **Education**                                |           |      |
| Elementary school                            | 4         | 3.74 |
| Secondary school                             | 17        | 15.89|
| High School                                  | 55        | 51.40|
| D1/D2/D3/D4                                 | 9         | 8.41 |
| Strata-1                                     | 21        | 19.63|
| Strata-2 and above                           | 1         | 0.93 |
| **Employment**                               |           |      |
| Government employees/ Indonesian national army/Police | 8        | 7.48 |
| Private employees                            | 4         | 3.74 |
| Entrepreneur/businessman                     | 17        | 15.89|
| Student                                      | 23        | 21.50|
| Others *                                     | 55        | 51.40|
| **Ages**                                     |           |      |
| ≤ 18 Old                                     | 13        | 12.15|
| 19 – 24 old                                  | 25        | 23.36|
| 25 – 50 old                                  | 61        | 57.01|
| > 50 old                                     | 8         | 7.48 |

*Note: *the status of free workers, family workers and take care of the household

Table 1 shows that 67 percent of the Lima Puluh Kota District Population and Civil Registry Office consumers are women. In terms of employment, 51.40 percent of consumers are recorded as other professions, namely freelance workers, family workers,
and household workers. By age, almost 60 percent of consumers are of working age (25-50 old). Even so, the number of consumers in school-age (24 old and under) is also relatively large at around 36 percent. The relatively large proportion of school-age consumers reflects the urgency of population service products and civil registration in Lima Puluh Kota District for residents of that age. Most consumers are recorded to have completed high school education (51.40 percent) and undergraduate degrees (19.63 percent).

**Measurement of conformity level (TK)**

The gap between expectation and the level of community satisfaction can be seen in Table 2. Of the 14 service attributes, the biggest gap is service personnel's discipline (-0.79), followed by the certainty of service cost attributes, (-0.66) and service speed (-0.51). This minus value shows that the community is not satisfied with the Population and Civil Registry Service of Lima Puluh Kota' services.

**Table 2.** The level of conformity (TK) between people's expectations and satisfaction according to the service attributes in the Population and Civil Registry Service Lima Puluh Kota District, 2017

| Service Attributes         | The average level of expectation | The average level of satisfaction | Gap    | TK (percent) | The priority order is based on TK |
|----------------------------|---------------------------------|----------------------------------|--------|-------------|----------------------------------|
| Service procedure          | 4.70                            | 4.27                             | -0.43  | 90.85       | 8                                |
| Service Requirements       | 4.60                            | 4.26                             | -0.34  | 92.68       | 9                                |
| Clarity of service personnel | 4.70                           | 4.21                             | -0.50  | 89.46       | 4                                |
| Discipline of service officers | 4.71                       | 3.92                             | -0.79  | 83.13       | 1                                |
| The responsibilities of the service officer | 4.66                      | 4.18                             | -0.49  | 89.58       | 5                                |
| The ability of service officers | 4.65                        | 4.22                             | -0.43  | 90.76       | 7                                |
| Speed of service           | 4.59                            | 4.07                             | -0.51  | 88.80       | 3                                |
| Justice gets service       | 4.50                            | 4.23                             | -0.26  | 94.18       | 12                               |
| Courtesy and friendliness of the officers | 4.59                      | 4.26                             | -0.33  | 92.87       | 10                               |
| Fairness of service fees   | 4.13                            | 3.95                             | -0.18  | 95.70       | 14                               |
| Certainty service costs    | 4.60                            | 3.93                             | -0.66  | 85.57       | 2                                |
| Certainty service schedules | 4.52                          | 4.10                             | -0.42  | 90.70       | 6                                |
| Environmental comfort      | 4.44                            | 4.21                             | -0.23  | 94.74       | 13                               |
| Service security           | 4.59                            | 4.32                             | -0.27  | 94.09       | 11                               |
| **Average**                | **4.57**                        | **4.15**                         | **-0.42** | **90.94** |                                   |

The level of conformity (TK) between the expectations and satisfaction of consumers who receive services at the Population and Civil Registry Service is presented in Table 2. Of the fourteen service attributes that are considered, none of them meet consumer expectations because all TK scores are <100 percent. The average TK score for all the assessed service attributes was 90.94 percent, with an average GAP value of -0.42. As in research (Himurke, 2012), all indicators of services provided have a negative GAP value. When viewed from the average GAP score, Himurke found -2.536, while in this study, only -0.42. As a result of the GAP value, which is quite large, Himurke concluded that it needs a comprehensive increase in all aspects of service provision.

Then in more detail, the calculated TK value for each attribute will determine the priority order of service improvements. The lower the TK score, the higher the priority for improving performance. Table 3 lists the TK scores for each service attribute at the Population and Civil Registry Office of Lima Puluh Kota District. Table 3 shows that the
discipline attribute of service personnel (4th attribute) is the main priority in improving service performance at the Population and Civil Registry Service of Lima Puluh Kota. Meanwhile, the service cost fairness attribute (10th attribute) gets the last priority for performance improvement.

**Quadrant analysis of IPA**

The priority order for performance improvement attributes is grouped by the average level of expectation (vertical blue line) and the average level of satisfaction (horizontal line). Determination of an attribute entered into a quadrant is based on the expectation score's coordinates versus each attribute's satisfaction. Group fourteen attributes into four IPA quadrants while dividing the order of priorities calculated as TK scores into simpler groups, namely quadrant A (priority for performance improvement), quadrant B (priority for maintaining performance), quadrant C (low priority), and quadrant D (not priority).

As illustrated in Figure 1, as many as seven service attributes are included in quadrant B, namely groups whose performance needs to be maintained. While the attributes included in quadrants A, C, and D are 3, 2, and 2. The results of the grouping of these quadrants indicate that the performance of the Population and Civil Registry Office of the Lima Puluh Kota District is quite good, with several records of improvement.

![Figure 1. The Cartesian quadrant of IPA service performance in the Lima Puluh Kota Population and Civil Registry Service](image)

Service attributes included in quadrant A are attributes that need to be improved because the level of satisfaction with the performance of these attributes is still below average. However, consumer expectations for these attributes' performance are above average. In other words, this is a top priority that the Population and Civil Registry Office of Lima Puluh Kota District should work on. From the results of the quadrant analysis, the main priority in improving the performance of the Population and Civil Registry Office of Lima Puluh Kota District lies in the discipline of the service apparatus (4th attribute), the certainty of service costs (11th attribute), and speed of service (7th attribute) which is represented in quadrant A. Similar to research (Rizq, 2018), Quadrant A consists of 3 items, namely requirements for ease of handling, speed of service processes, facilities, and physical conditions of office buildings, with service processing speed as the item that holds the highest expectations.
Meanwhile, from the research (Windyani, 2011), service attributes in quadrant A are other supporting materials, immediate attitude to provide service, and immediate attitude to help when busy. From this research, it can be seen that the community's expectation of the speed of service is high while the performance is still low. According to Rizq, this happened due to a lack of human resources in services and an unclear queuing system.

Other aspects of service officers (clarity of service officers (3rd attribute), the responsibility of service officers (5th attribute), the ability of service officers (6th attribute), and politeness and friendliness of service officers (9th attribute)), can meet the average level of respondent satisfaction. So it needs to be maintained (quadrant B). Other service attributes that need to be maintained by the Population and Civil Registry Office of Lima Puluh Kota District include: service procedures (attribute 1), service requirements (attribute 2), and service security (attribute 14).

The quadrant analysis results also show that the certainty of service schedules (12th attribute) and the fairness of service costs (10th attribute) are included in the C quadrant, which is a low priority in improving performance. Besides, the attributes that tend to be in the form of excessive-performance, in other words, the level of satisfaction exceeds the average but considered not too necessary by consumers, are collected in the D quadrant, and justice in receiving services (attribute 8). In contrast to Rizq's research, Quadrant D's attributes are variable costs that must be incurred. The community is not too concerned with costs, prefers good services, and is willing to pay for these services. The resources used in Quadrant D's attributes can be transferred to other attributes to increase Customer satisfaction.

**CONCLUSIONS AND RECOMMENDATIONS**

**Conclusions**

The level of education and employment determine the assessment of expectations and service satisfaction of the Department of Population and Civil Registration of Lima Puluh Kota District. In the characteristics of education, there is a tendency where the lower the level of education, the lower the evaluation of the importance of service attributes will be. Consumers with a Strata-1 education and above have satisfaction ratings less than the average for all service attributes on the satisfaction side. Conversely, consumers who are educated below Strata-1 tend to give satisfaction ratings above average.

Consumers who work as Government employees/ Indonesian national army/ Police and Entrepreneur/ Businessman tend to put expectations above average but give lower than average satisfaction ratings for the services received. On the other hand, consumers with other occupations, namely those who work as free workers, family workers, or take care of the household, tend to put expectations below average but are more satisfied with their services. Meanwhile, consumers who work as private employees and students tend to assess expectations and satisfaction equal to or above average.

**Recommendations**

The analysis in this study has not touched on the relationship between cross-sectoral problems. So far, the research has attempted to present policy analysis and recommendations based on the Department of Population and Civil Registration perspective as service providers. Although there are such limitations, this study's purpose has been achieved by knowing the Population and Civil Registration Service of Lima...
Puluh Kota’ performance. It is reflected by the consumer satisfaction index and the contribution of several policy recommendations to improve specific service attributes' performance. For that, we need broader research from the consumer side as service recipients.

This study suggests several general strategies for performance improvement derived from implementing performance management techniques. From a scientific perspective, for the next few years, a quantitative study with a systematic analysis is needed to measure the effect of recommended performance management on improving performance in the Population and Civil Registry Office of Lima Puluh Kota District. The study in question is expected to use a longitudinal research design so that several influences on performance attributes can be more accurately identified.

REFERENCES

BAPPENAS. (2009). Data dan Publikasi: Pokok-pokok Penyelenggaraan Pembangunan Nasional. Retrieved April 22, 2020, from Kementerian PPN/BAPPENAS: https://www.bappenas.go.id/files/3413/4986/1934/info__20091015133401__2370__0.pdf

BPS. (2013). Produksi Penduduk Indonesia 2010-2035. Jakarta: BPS.

Febrianda, L. (2009). Rekonstruksi Regulasi Pelayanan Kependudukan Dan Pencatatan Sipil Oleh Birokrasi Pemerintahan Dalam Perspektif Hukum Administrasi Negara. Semarang: Universitas Diponegoro.

Haluan. (2016). Disdukcapil Lamban Urus Dokumen Kependudukan. Retrieved Desember 2, 2018, from https://www.harianhaluan.com/news/detail/60549/disdukcapil-lamban-urus-dokumen-kependudukan

Himurkhe, J. (2012). Measuring Internal Costumers’ Perception on Service Quality Using SERVQUAL in Administrative Services. International Journal of Scientific and Research Publication, 2(3),1-6.

Kamarni, N. (2011). Analisis Pelayanan Publik Terhadap Masyarakat (Kasus Pelayanan Kesehatan di Kabupaten Agam). Jurnal Managemen dan Kewirausahaan, 2(3), 84-110.

Khadka, K., & Maharjan, S. (2017). Customer Satisfaction and Customer Loyalty. Centria University of Applied Sciences. Kokkola: Centria University of Applied Sciences.

Martilla, J.A & James, J.C. (1977). Importance-Performance Analysis. Journal of Marketing, 41(1)

Nugraheni, Z. A. A. (2015). Analisis Kepuasan Masyarakat terhadap Pelayanan Publik Berdasarkan Indeks Kepuasan Masyarakat di Kantor Kecamatan Mungkid Kabupaten Magelang [Skripsi]. Yogyakarta: Fakultas Ekonomi Universitas Negeri Yogyakarta.

Ombudsman RI. (2017). Maladministrasi Pelayanan KTP-EL. Jakarta: Ombudsman RI.

Prayudi. (2018). Mengapa masalah DPT terus terjadi? Info Singkat kajian singkat terhadap isu aktual dan strategis, Vol.X No.18. Jakarta. Pusat Penelitian Badan Keahlian DPR RI.

Rasyid, R. (2000). Makna Pemerintahan: Tinjauan Dari Segi Etika Dan Kepemimpinan. Jakarta: Mutiara Sumber Widy.

Retwando. (2015). Analisis Pelayanan Perizinan Bidang Penanaman Modal di Kabupaten Agam. [Tesis]. Universitas Andalas, Program Studi Magister Perencanaan Pembangunan Fakultas Ekonomi, Padang.
Riduwan, Rusyana, A., & Enas. (2013). *Cara Mudah Belajar SPSS 17.0 dan Aplikasi Statistik Penelitian*. Bandung: Alfabeta.

Rizq, S., Djamaludin, M.D., & Nurhadryani, Y. (2018). Analysis of Service quality Satisfaction of E-KTP Service at public Administration Office of Bogor District. *Journal of Consumer Sciences*, 3(2), 55-65.

Sofyan, A. (2013). Kinerja Pelayanan Kependudukan Pada Dinas Kependudukan Dan Catatan Sipil Kabupaten Bandung Barat. *Jurnal Universitas Yapis Papua*, 3(11), 1-13.

Wilson, A., Zeithaml, V., Bitner, M. J., & Gremler, D. (2016). *Services Marketing - Integrating Customers Focus across the Firm* (Third Edition ed.). Boston: McGraw-Hill.

Windyani, A. R., Hubeis, A. V.S., & Fahmi, I (2014). Analisis Kepuasan Masyarakat Terhadap Pembuatan Akta Kelahiran di Depok, Jawa barat. *Jurnal Aplikasi Manajemen*, 12(1), 32-40
APPENDIX

Table 3. Correlation between priority service attributes

| No. | Correlation                               | Expectations | Satisfaction |
|-----|-------------------------------------------|--------------|--------------|
| 1   | Officers Discipline and Service speed     | 0.42         | 0.36         |
| 2   | Officers Discipline and certainty of service costs | 0.21         | 0.13         |
| 3   | Service speed and certainty of service costs | 0.24         | 0.06         |

Among the three correlations assessed, officer discipline was found to have a relatively strong correlation with service speed on both the expectation score and the satisfaction score with a value of 0.42 and 0.36. It means that the increase in performance that will be carried out on officers’ discipline will affect the performance of service speed and vice versa.

Table 4. Calculation of the Community Satisfaction Index (IKK) of Population and Civil Registry Office of Lima Puluh Kota District, 2017

| Attribute | The level of importance per attribute | Satisfaction rate per attribute | Weights per attribute | Weighted average per attribute |
|-----------|--------------------------------------|-------------------------------|-----------------------|------------------------------|
| (i)       | (yi)                                 | (xi)                          | (wi = yi / Σyi)         | (wi * xi)                    |
| 1         | 4.70                                 | 4.27                          | 0.073                 | 0.314                        |
| 2         | 4.60                                 | 4.26                          | 0.072                 | 0.306                        |
| 3         | 4.70                                 | 4.21                          | 0.073                 | 0.309                        |
| 4         | 4.71                                 | 3.92                          | 0.074                 | 0.288                        |
| 5         | 4.66                                 | 4.18                          | 0.073                 | 0.305                        |
| 6         | 4.65                                 | 4.22                          | 0.073                 | 0.307                        |
| 7         | 4.59                                 | 4.07                          | 0.072                 | 0.292                        |
| 8         | 4.50                                 | 4.23                          | 0.070                 | 0.297                        |
| 9         | 4.59                                 | 4.26                          | 0.072                 | 0.306                        |
| 10        | 4.13                                 | 3.95                          | 0.065                 | 0.255                        |
| 11        | 4.60                                 | 3.93                          | 0.072                 | 0.283                        |
| 12        | 4.52                                 | 4.10                          | 0.071                 | 0.290                        |
| 13        | 4.44                                 | 4.21                          | 0.069                 | 0.292                        |
| 14        | 4.59                                 | 4.32                          | 0.072                 | 0.310                        |

\[ \sum y_i = 63.98 \quad \text{IKK'} = 4.154 \quad \text{IKK} = 83.08 \]

According to the Regulation of the Minister for Empowerment of State Apparatus and Bureaucratic Reform Number 14 of 2017, the IKK score is classified as good service quality. These results indicate that the performance of public services organized by the Population and Civil Registry Office of Lima Puluh Kota District has met most consumers' expectations.

© 2020 by the authors. Licensee JPPD, Indonesia. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).