



# PARTICIPATORY COMMUNICATION STRATEGIES, BASIC SANITATION AND PUBLIC HEALTH OF THE PEOPLE OF PAUCARTAMBO-CUSCO

ESTRATEGIAS DE COMUNICACIÓN PARTICIPATIVA, SANEAMIENTO BÁSICO Y LA SALUD PÚBLICA DE LOS POBLADORES DE PAUCARTAMBO-CUSCO

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## ABSTRACT

**Objective:** Analyze the influence that the application of participatory communication strategies has on the proper use of basic sanitation services and its impact on the public health of the inhabitants of Paucartambo. Explore the political and cultural dimensions immersed in communication processes. **Methods:** The approach is quantitative and qualitative, with a cross-sectional design based on unstructured interviews and in-depth interviews, observation. Data from the National Population and Housing Censuses 2017, 2007-National Institute of Statistics and Informatics (INEI) were used. **Results:** In-depth interviews, as well as direct observation, show that although efforts have been made to improve the situation of basic sanitation through the installation of a public drainage network, and other forms such as latrines and septic tanks, in addition, if they were insufficient, they were not used properly, because participatory communication strategies were not applied from the diagnosis stage to the final evaluation, even more so due to the permanent lack of monitoring and surveillance activities, which have a very decisive role in the quality of life and therefore in public health. **Conclusion:** The interview as a qualitative collection instrument has allowed us to obtain enriching data from the population of Paucartambo, identifying that the communication strategies most used by the institutions have been of a vertical nature such as talks, radio, the use of pictures, It is precisely for this reason that knowledge, attitudes, and appropriate practices were not generated for the use and conservation of services, a situation that had a direct impact on public and environmental health.

**Key words:** Participatory communication strategies; Basic Sanitation; Public Drainage Network; Public health (source: MeSH NLM).

## RESUMEN

**Objetivo:** Analizar la influencia que tiene la aplicación de estrategias de comunicación participativa en el uso adecuado de servicios de saneamiento básico y su incidencia en la salud pública de los pobladores de Paucartambo. Explorar las dimensiones políticas y culturales inmersas en los procesos de comunicación. **Métodos:** El enfoque es mixto cuantitativo y cualitativo, con un diseño de tipo transversal en base a entrevistas no estructuradas y entrevistas en profundidad, observación. Se utilizó datos de los Censos Nacionales de Población y Vivienda 2017, 2007- Instituto Nacional de Estadística e Informática (INEI). **Resultados:** Las entrevistas a profundidad, así como la observación directa, muestran que si bien se han realizado esfuerzos por mejorar la situación del saneamiento básico a través de la instalación de red pública de desagüe, y otras formas como las letrinas y pozos sépticos, además de ser insuficientes, no fueron utilizados adecuadamente, porque no se aplicaron estrategias de comunicación participativa desde la etapa de diagnóstico, hasta la evaluación final, más aun por la falta permanente de actividades de monitoreo y vigilancia, que tienen un rol muy decisivo en la calidad de vida y por tanto en la salud pública. **Conclusión:** La entrevista como instrumento de recolección cualitativa nos ha permitido obtener datos enriquecedores de la población de Paucartambo, identificando que las estrategias de comunicación más utilizadas por las instituciones, han sido de carácter vertical como las charlas, la radio, el uso de láminas, precisamente por esta razón no se generaron conocimientos, actitudes y prácticas adecuadas para el uso y la conservación de los servicios, situación que tuvo incidencia directa en la salud pública y ambiental.

**Palabras clave:** Estrategias de comunicación participativa; Saneamiento Básico; Red Pública de Desagüe; salud pública (fuente: DeCS BIREME).

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## INTRODUCTION

The Millennium Development Goals (MDGs) have generated the most successful movement against poverty, with the commitment that world leaders assumed in 2000 to “spare no effort to liberate our fellow men, women, and children. from the abject and dehumanizing conditions of extreme poverty, facing the roots of the causes, starting from integrating the economic, social, and environmental dimensions of sustainable development; Of the 8 objectives, the 7th refers to Ensuring environmental sustainability since 1990, of the 2.6 billion people who gained access to improved drinking water sources, 1.9 billion did so through piped drinking water until its own home<sup>(1)</sup>.

Of the 17 Sustainable Development Goals (SDGs), 6 refers to Clean water and sanitation to guarantee the availability of water and its sustainable management and sanitation for all. At the Sustainable Development Summit held in September 2015, UN Member States approved the 2030 Agenda for Sustainable Development, to end poverty, fight inequality and injustice, and tackle climate change<sup>(2)</sup>.

The Montevideo Consensus on Population and Development (2014) is signed with the objective of examining its progress in Latin America and the Caribbean in the last 20 years and identifying the fundamental measures to reinforce its implementation, placing emphasis on emerging regional issues in population and development, and on human well-being and dignity, as well as its sustainability<sup>(3)</sup>.

In Peru, the coverage of water supply and sanitation services has increased significantly according to the population and housing censuses; However, various social, economic, and cultural factors do not allow its implementation, affecting public health.

At the same time, assume the country commitment, to respond to the great challenges to face inequities, water, and sewage services are still precarious, few households have a toilet, in rural areas a large percentage continues to eliminate their excreta in latrines, manholes or open-air, a situation that affects public health.

The Regional Sanitation Plan, Cusco 2018-2021, a management instrument within the framework of the National Basic Sanitation Policy, looking forward to 2030<sup>(4)</sup>, establishes the regional sanitation objectives, to achieve the millennium development goals and the Sustainable development.

The achievement of these objectives depends on

many factors: public policies, greater budget for the efficiency, equity, and sustainability of the provision of these basic services, the concerted participation of organizations, environmental management systems to generate a culture in public health, and participatory communication strategies.

Paucartambo, is located 110 kilometers from Cusco, at an altitude of 3005 meters above sea level, made up of 20 population centers, 38 peasant communities, an urban population is 9,352 and the rural population is 41,055, surface area 6,295.01 km<sup>2</sup>, density (Inhab./Km<sup>2</sup>) 8, population centers 74 to 2018<sup>(5)</sup>.

As of 2012, it presented a Human Development Index (HDI) of 0.1798 with the participation of key leaders such as the municipality, the Health Center, the University of Cusco, and civil society, projects have been developed to improve the quality of life of the population<sup>(5)</sup>.

In 2007, there were 3,011 homes that had a toilet, a public drainage network inside the home; public drainage network outside the home, but inside the building 5,073, septic tank, septic tank or biodigester 4,650 blind or cesspool or pit latrine 9,186, river, canal, canal or similar 633, does not have 22,941 out of a total of 45,494 homes<sup>(6)</sup>.

For the year 2017, regarding the hygienic service that the home has: public drainage network within the home 6,561, public drainage network outside the home, but within the building 7,999 Septic tank, septic tank or biodigester 5,147, latrine 3,984, blind or black well 7,448, river, ditch, canal or similar 1,647, open field or outdoors 8,759, out of a total of 41,983<sup>(6)</sup>. Observing a considerable increase regarding the implementation of the drainage network inside the house, as well as outside it, with a considerable decrease in the use of cesspool or cesspool and latrine; However, the increased use of canal or similar, open field or outdoors for the elimination of excreta is striking.

It is precisely to sensitize the population and generate different practices that communication programs were implemented, but they had no positive impact, because the communication strategies were not participatory, or they did not use means compatible with the social and cultural matrix of these communities.

By not causing changes in the knowledge, attitudes, and practices of the population, health problems were generated; Thus, in 2012 and 2013, 32.3% of girls and boys under five years of age suffered from



anemia, due to malnutrition exacerbated by hygiene conditions, being more critical in rural areas, the data gives an account of the prevalence of anemia in these two years<sup>(7)</sup>; Of the 9361 children under 5 years of age evaluated in the Paucartambo Micro Network, 38.5% had chronic malnutrition.

The implementation of communication strategies is imperative, to define axes and tones that are more conducive to each sociocultural matrix, considering their communicative rationality around the problem. The communication strategy is a conversational device that lays the foundations for desirable social interaction within the framework of a project<sup>(8)</sup>. Strategies define what and tactics define how.

Health culture is the broad manifestation that transcends the interest placed in people, it is assumed as the scale of values that sustains the practice of those who inhabit<sup>(9)</sup> building the cognitive, affective level and of the practices implies many conditions such as language and speech to formulate messages and ensure proper use of basic services.

In argumentative speech different aspects are distinguished, in this sense I have tried for my part to make explicit the general communicative presuppositions of argumentation, understanding them as determinations of an ideal speaking situation<sup>(10)</sup>.

**METHODS**

**Design and study area**

The Design is non-Experimental, with a qualitative approach, in-depth interviews were applied for the leader of the health center and the decision-makers and Unstructured for the residents, as well as direct observation.

**Population and sample**

The sample was selected with non-random criteria for convenience, identifying Mahuaypampa and Totorani (Sectors Baderillero, Huacacancha Pata, Mula Tolluyoc Pata, Pausi Pampa, Tabla Pascana, 50 study subjects according to the following detail:

**Table 1.** Selection of the Sample.

| 2 Focus Groups | Men | Woman | Leaders Health Center | Decision   |
|----------------|-----|-------|-----------------------|--|
| Mahuaypampa    | 10  | 10    | 1 Nurse               | Mayor Paucartambo  |
| Totorani       | 10  | 08    | 1 Doctor              | Community Authorities:<br>President Community<br>1 Health Promoters<br>1 Former Promoter<br>1 Mothers Club<br>1 Vaso de leche University:<br>1 Physician<br>1 Nurse<br>1 Teacher |

**Variables and instruments**

Participatory Communication Strategies, Basic Sanitation and Public Health

Instruments: Unstructured Interview Questionnaire, Observation Guides

**Procedures**

Interviews with focus groups and community authorities were conducted in Quechua, were

translated by Quechua-speaking students, to process the results with the Atlas Ti, considering different categories: map of leaders, discourse, strategies, among others.

For direct observation, the units of analysis were: state of conservation of sanitation services, hygienic practices: hand washing, use of spaces for the elimination of excreta.



## Ethical aspects

The data obtained correspond to reality and all ethical standards were complied with, such as keeping the names of the interviewees confidential.

## RESULTS

### Map of Leaders

Organizations, Club de Madres-Vaso de Leche, are organizations that bring together most of the women in the community, the activities are coordinated with the Health Center.

P 3: Sick. Rosa.txt-3: 6 (96: 107) (Super).

We are already incorporating community leaders in this health process, the public drainage network, and in some communities latrines, are an option to reduce the diseases and lifestyles.

Community authorities: The president of the community is a leading actor in regards to health, actively supports the work of the Health Center staff.

The health promoter is appointed in the community assembly, receives frequent training, administers some basic medicines, and constitutes the link between the health center and the community.

Inhabitants of the community, women participate actively.

P 2: Medical Center of Health.txt - 2: 4 (46:66) (Super).

After the Promotion campaign and in close coordination with the community leaders they are carried out activities to promote active participation. With the installation of the public drainage network, it could be pointed out that it was possible to significantly reduce the incidence of diarrhea, especially in children, as well as the problem of parasitosis, which was verified with pre- and post-intervention indicators.

### State

#### *Health Center of Paucartambo*

It has the regular support of nursing and medicine interns from the University of Cusco, who do their rural internship, it has a certain space and prestige, based on the outstanding work in the preventive-promotional and reparative area.

P 1: Poblador 01.txt - 1: 1 (5: 8) (Super).

It seems to me that they have come from Paucartambo from the Health Post, also from the University.

P 6: Health surveillance.txt - 6: 3 (21:33) (Super) Totorani.

When There was Cholera in the Community and some community members died so we worried and those from the Health Center said it was because we did not have water and sewage.

### Education

In the study communities, there is an educational center, with poor infrastructure and equipment. a few teachers who carry out health education activities.

P 6: Health Surveillance.txt - 6: 1 (4: 8) (Super).

More have come from the Paucartambo Health Center. Sometimes the School Teacher has also given talks.

### University

The National University of Cusco has a significant presence, through medical and nursing students and interns who carry out temporary internships in the Health Center and in the communities.

P 2: Medical Center of Health .txt - 2: 1 (4:10) (Super).

The Faculty of Medicine of the University of Cusco. She works with some frequency in the communities and in the Faculty of Nursing.

P 4: Settlement 04.txt - 4: 7 (91:94) (Super).

The Nurse and doctors from the University always come, they say they are.

The relationship between the Health Center and the University is horizontal, they are institutions of the official system and They use similar cultural patterns.

Relations between the community and the health center, beyond good intentions, have been vertical and bureaucratic, manifested in a passive acceptance of the decisions of the health center.

### The discourse

Traditionally the communities have conceptions, means and practices to face their health problems, through traditional medicine, with elements of the Andean culture.

Health communication is recognized as playing a very important role as a process to achieve practices appropriate in relation to health and disease. However, communication is poorly developed from the health services.

### The Discourse on Diseases

They clearly indicate that there is a more or less clear



perception of diseases related to basic sanitation.

\* P 2: Medical Center of Health .txt - 2: 2 (12:36) (Super).

The most acute health problems in the communities are ARI, EDA, enteroparasitosis, Malnutrition, Pyodermitis, pediculosis, gestations - births We have provided comprehensive medical care twice a month to all residents, all the population was parasitized.

P 4: Villager 04.txt - 4: 2 (10:24) (Super).

It gives them diarrhea, one month, two months When I go to the post it calms down, I always wash if we don't get sick, too of flies there is diarrhea.

### Discourse on hygiene practices

The residents know and value personal hygiene practices, but this speech does not correspond directly to what is observed, it is appreciated that such practices are not daily. For the preparation and ingestion of food, they do not always wash their hands, in the toilets there is no toilet paper or soap, due to economic limitations, and the relative impact of communication strategies.

P12: Poblador 12.txt - 12: 4 (29 : 50) (Super) We only use urine to defecate (hatún hispay) we do it in the field.

We know that after using the bathroom you have to wash your hands and we comply because we can get sick ... Yes, we know.

### Speech on latrines

A large percentage recognize the importance of the public drainage network and latrines for the prevention and control of infectious diseases.

P 2: Settlement 02.txt - 2: 4 (51:67) (Super).

Since there is a drain, the diseases have decreased, before there were enough flies, to eat well the doctors also told us, some colleagues did not put importance.

on the strategies communication for use of toilets and other forms of excreta disposal indicate that did not take into account important elements such as: achieve a horizontal relationship, respect for their cultural patterns, negotiation (commitments involving mutual responsibilities).

the Health Center staff point out that the communication was based on the recognition of the communal organization, the use of Quechua, a contest with prizes, the link between basic sanitation and general health.

The residents specify that, although these institutions

had a significant presence, but there was no technical assistance or follow-up in the actions, including communication practices.

### Presence of Traditional Medicine

In Paucar Tambo, the persistence of traditional Andean culture is recognized, with different forms of participation: The community members have effective communication practices such as communal assemblies, spaces for debate, but they are not democratic because women indicate that they do not actively participate

Oral tradition In the Andean communities it is very strong, the consensuses, the senses are built from face-to-face communication, which is very effective, not only are they capable of exchanging information, but fundamentally affectivities, feelings, for that reason it is strongly valid.

The radio has been the means most used by the Health Center, to send some very sporadic messages

### DISCUSSION

The data from the 2017 census of the INEI, although they show a considerable increase with respect to the availability of a Drainage Services Network, however, there is a considerable increase in those who dispose of excreta in river channels, or in the open field, communication strategies to promote culture in health, as well as the conservation of basic sanitation services, did not use participatory forms, monitoring activities were lacking and surveillance.

Similar research results specify that internal communication is key to the formation of a new culture in health and that therefore the internal communication approach must essentially include health promotion in order to promote actions in this regard<sup>(11)</sup>.

The knowledge of health personnel is inherent in their academic training and linear philosophy, which gave rise to the second category: technical dimension, where the discourses were oriented towards the conception of health, dependent on technical intervention<sup>(12)</sup>.

Effective communication is one based on the needs of the leaders, has a flexible plan, with few practical and standardized messages. Regarding the sustainability of the initiatives related to the improvement of water and sanitation conditions, their effectiveness strongly depends on changes in behavior on the part of the population, as in the

case of handwashing. Hand hygiene reduces the frequency of gastrointestinal diseases<sup>(13)</sup>.

It is also pointed out that a healthy city must be conceived as a "force-idea" to stimulate health in development, emphasizing the development of processes and not only that of results; betting on the gradual changes in lifestyles, on the awareness of the community regarding its rights, duties and responsibilities and on the exercise of creative participation<sup>(14)</sup>.

To build healthy and sustainable cities, it is important to implement basic services. Sanitation prevents disease and promotes human dignity and well-being, which is in perfect agreement with the WHO definition of health, expressed in its constitution, as "A state of complete physical, mental and social well-being, and not simply the absence of illness or disease"<sup>(15)</sup>.

## CONCLUSION

1. The communication strategies most used to promote the proper use of basic sanitation services have been vertical in nature, such as talks, radio, and the use of pictures.
2. The knowledge and attitudes are relatively adequate, but their practices are not consistent with their speech.
3. The main decisions in relation to health continue

to be made by the organizations, with little level of community participation.

4. The cultural context in which health practices are developed is characterized by the interaction of two Andean and Western cultures, with a clear dominance of the former.
5. Regarding the traditional communication practices and space used by the population in relation to health, direct face-to-face communication is still valid.

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