
Exploring Child Scavenging in Tehran: Causes and Consequences in the City and Its Suburbs

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How to cite this article: Kameel Ahmady (2025). Exploring Child Scavenging in Tehran: Causes and Consequences in the City and Its Suburbs. *Library Progress International*, 45(1), 260-267

ABSTRACT

This research examines the prevalence and impact of child scavenging in Tehran, highlighting it as one of the most harmful forms of child labor. Despite national and municipal regulations, children are extensively involved in scavenging activities, leading to significant harm and violation of their rights. Utilizing grounded theory methodology, data was collected through interviews and observations, focusing on scavenging children and related adults. The study identifies three main contexts driving child scavenging: economic factors such as poverty and the waste economy, socio-cultural influences including family dynamics and social networks, and policy-related issues like waste management practices. These children often work within exploitative social networks, experiencing poor working and living conditions that heighten their vulnerability and hinder effective socialization. The study concludes that eliminating child scavenging in Tehran requires a comprehensive policy interventions both in Afghanistan and in Tehran's waste management system, and it offers specific recommendations to address these challenges.

KEYWORDS

Child labor, Scavenging, Children, Waste economy, Grounded theory.

Introduction

Child labor in various forms, including scavenging, remains a significant issue in Tehran. For decades, child scavenging has been prevalent, evolving into a serious social problem and a blatant violation of children's rights. Despite existing laws and waste management guidelines, many children are still engaged in this hazardous work.

The appropriate age for employment is primarily determined by the job's impact on a worker's health and development. According to the International Labor Organization's (ILO) Convention No. 138, specific occupations have minimum age requirements. UNICEF defines child labor as work exceeding a certain number of hours depending on a child's age and the type of work, deeming such work harmful and thus subject to elimination. Globally, child labor is recognized as a violation of children's rights (International Labor Office & United Nations Children's Fund, 2021).

Working children are often exposed to exploitation, abuse, and violence (Jha, 2009). The adverse effects of scavenging on children are extensive, affecting all aspects of their lives, restricting their access to education and future employment opportunities, and endangering their physical, mental, social, and spiritual well-being. Although illegal in Iran, child labor, especially in scavenging, persists, driven largely by economic necessity. While scavenging children is a visible phenomenon in most of transitional societies (Batool et al., 2015), this phenomenon is more common in Tehran, where it is considered one of the worst forms of child labor, depriving children of their childhood, potential, and dignity, and harming their development.

Despite Iran's commitments to international conventions against child labor, the issue remains widespread. The Iranian government has signed the Universal Declaration of the Rights of the Child and enacted laws to prohibit child labor, including scavenging. Article 79 of the Iranian Labor Law prohibits employing children under 15, while Article 84 sets the minimum working age at 18 for jobs harmful to health or morals. Nevertheless, many children, especially in Tehran, continue to work as scavengers. The high turnover in this industry suggests the involvement of organized groups that exploit these children.

This study aims to investigate child scavenging in Tehran by examining its causes and implications and addressing questions about social relations within the garbage industry, the factors driving children to scavenge, and the repercussions of this labor.

Research Background

The significance of waste materials has been recognized since humans first realized their potential for recycling. The importance of recyclable materials grew exponentially with industrial production. As urbanization progressed, waste management became crucial for city management (Scott, 2012). Population growth and increased consumption have made waste management essential for urban sustainability.

Developing countries generate substantial waste, often exacerbated by weak management and limited resources (Wilson et al., 2012). This has led to the rise of an informal waste recycling sector. Globally, about 15 million people work in informal waste management (Medina, 2007). Iran produces around 50,000 tons of waste daily, with Tehran generating about 7,500 metric tons per day (Nozarpour, 2017). Dry garbage in Tehran generates significant added value (Afrakhteh & Hojjatipour, 2017).

Poverty drives many individuals to engage in garbage collection. The majority are from marginalized groups such as immigrants, women, children, and the homeless (Dias, 2012; Wilson et al., 2012). Child labor in scavenging deprives children of their childhood, potential, and dignity and is harmful to their development (ILO, 2004).

Poverty is a significant factor in children's scavenging. Families involve their children in such labor to meet basic needs (Hunt, 1996). Many scavenging children come from low-income households, often suffering from health issues and lack of education (Hunt, 1996; Aljaradin et al., 2015). Iranian child laborers are often Afghan immigrants (Hosseini, 2004; Imani & Nersisiance, 2011).

Scavengers collect materials from various sources, turning to the informal waste sector for income (Thieme, 2013). They work under exploitative conditions in the unregulated informal economy (Rogerson, 2001). Many children live in poor conditions with minimal infrastructure (Cuadra, 2005).

Garbage collectors are often seen as victims of globalization, modernization processes, and neoliberal systems. Meanwhile, certain social groups, particularly municipal authorities and private waste-management companies, accuse scavengers of stealing their declared property, the urban garbage. Also, for many national and local authorities, scavenging is incompatible with the idea of modern cities (Patwary, O'Hare & Sarker, 2011).

Scavenging exposes children to numerous hazards, leading to health problems. They face diseases and injuries due to poor working and living conditions (Rogerson, 2001). Long-term social, mental, and emotional impacts are significant due to hazardous working conditions (ILO, 2017). Addressing these issues requires understanding the socio-economic and policy factors contributing to child scavenging in Tehran and implementing targeted interventions to protect these vulnerable children.

Recent studies further highlight the multifaceted issues surrounding child labor in Iran. Ahmady's socio-cultural analysis (2021) delves into the exploitation and exclusion faced by child laborers in Iran, providing a comprehensive understanding of the socio-economic and cultural dynamics at play. Additionally, Ahmady's presentation at the 13th Eurasian Conference on Language and Social Sciences (2023) sheds light on the systemic issues and policy gaps that perpetuate child labor in the region. These works emphasize the urgent need for policy interventions and support mechanisms to address the root causes of child labor, including poverty, lack of education, and social exclusion.

Materials and Methods

This study investigates scavenging in Tehran through a qualitative methodology known as grounded theory, which seeks to develop or construct a theory from empirical data. This approach is particularly effective for forming a theory on scavenging among children in Tehran.

To comprehend this phenomenon, data were gathered using a semi-structured interview technique. All 22 districts of Tehran were included, with interviews conducted with garbage collectors using purposeful and, at times, convenience sampling methods. The interview group employed both area sampling and direct interviews with garbage collectors. Each interview lasted between 15 to 45 minutes and was conducted over three months. Approximately half of these interviews were 'in-depth' or 'semi-in-depth,' while the other half were 'surface-level' interviews.

To gain a comprehensive understanding of the lives of garbage collectors, specific districts and communities in Tehran (recycling sites) and its suburbs (garbage dumps) were visited and observed. Interviews were conducted with both children, who were the primary focus, and some adults to gain insights into common interactions during scavenging work. A total of 302 interviews were conducted, with more than half involving children. The large number of interviews was necessary because garbage collecting in each region could be influenced by local variables. As a result, original cases and new insights emerged, necessitating further interviews and inquiries with garbage collectors from all areas, as well as with as many individuals as possible within each area. Additionally, individuals directly involved with garbage collectors, such

as garage owners or recycling workers, were briefly interviewed to supplement the information and broaden the study's scope.

To further understand the field of child scavenging, relevant technical literature was reviewed and analyzed. The data collected were then analyzed using a three-stage coding method (Corbin & Strauss, 2015), resulting in the development of a background model for scavenging in Tehran. This model was derived from the open and axial coding of the research data. According to Corbin and Strauss, grounded theory is valid as it is constructed from research data.

To enhance the validity of the research, a team was organized to collect reliable data through interviews across various regions. Team members collaborated and supervised each other throughout all stages, particularly during data collection and analysis. Experts in child labor studies reviewed the report, and their suggestions and opinions were carefully considered to refine the study's findings and conclusions.

Demographic Profile of Scavengers

According to estimates, more than 15,000 people in Tehran are engaged in scavenging, which means approximately 5,000 of them are children (Association for the Protection of Children’s Rights, 2019).¹ This study examined the demographic characteristics and working conditions of a sample group of scavengers in Iran. The researchers collected data on the nationality, gender, age distribution, daily work patterns, and economic factors related to the scavenging activities of this group. The findings provide a detailed profile of the scavengers and offer insights into the challenges they face in their day-to-day work. The key information from the study is summarized in the table below:

Table 1. The demographic characteristics and working conditions of scavengers

Characteristic	Percentage/Value
Nationality	96% Afghans (290 people), 3% Iranians (9 people), 1% Pakistanis (3 people)
Gender	100% Male
Afghan Scavengers by Province	95.5% from Herat, the rest from Balkh, Badakhshan, Faryab, Badghis, Ghazni, and Maidan Wardak
Legal Status in Iran	89% Illegal Immigrants, 11% Legal Immigrants
Age Distribution	2% ≤ 10 years, 23% 11-14 years, 30% 15-17 years, 45% > 18 years
Average Age	14.2 years
Daily Garbage Collection	10% < 50 kg, 27% 51-100 kg, 24% 101-150 kg, 17% 151-200 kg, 21% > 200 kg
Garbage Selling Price	63% 2,000-4,000 Rials/kg, 21% 4,000-6,000 Rials/kg, 16% ≥ 6,000 Rials/kg
Daily Work Hours	21% 4-8 hours, 46% 8-12 hours, 23% 12-16 hours, 10% > 16 hours

According to the study, child scavenging remains a widespread issue in Tehran and its suburbs, with an estimated 5,000 children engaged in this work. The findings provide a detailed demographic profile of the scavengers and highlight the challenging working conditions and economic pressures they face.

Fields of Child Labor

Child labor in the form of scavenging is a significant issue in Tehran, Iran, driven by interconnected economic, socio-cultural, and policy factors.

The economic context is a major contributor, as Afghanistan - where many of the scavengers are from - is one of the poorest countries in the world. Over 36% of the Afghan population lives below the poverty line, and the ongoing war has exacerbated this (Isari and Shojaeizand, 2020). Many children from impoverished Afghan families migrate to Iran, joining scavenging networks established by relatives and acquaintances in Tehran. As one 17-year-old scavenger explained, his entire family is unemployed back in Afghanistan.

¹ This estimate is provided by provided by the Deputy Minister of Waste Planning in Tehran. Using another method, the number of garbage collectors was estimated to be 13,968 persons, and the number of garbage-collecting children was estimated to be 4,656.

The socio-cultural context in Afghanistan also plays a role. Early marriage and high birth rates put additional financial strain on families, leading children to join the labor force. Marriages in Afghanistan often require a substantial dowry payment to the bride's family, forcing grooms and their families to work for years to finance this cost. As one child said, "A woman can be bought among us. If she comes without a dowry, we must pay 350 million to the father of the bride, but if she is with a dowry, you have to pay one milliard Rials or more to the father of the bride." This drives children to seek income through scavenging.

The policy context in Iran also contributes to child scavenging. Discriminatory laws restrict the occupations Afghan immigrants can pursue, effectively funneling them into low-wage jobs like waste collection and recycling. The Foreign Employment Guideline only permits Afghan citizens to work in four main occupational groups, including "other vocational groups" where waste disposal and recycling fall.

Beyond the legal discrimination, the expansion of the garbage economy in Tehran has created a breeding ground for child labor. The city's growing population, increased consumption, and poor waste management have resulted in massive amounts of waste. While the municipality's official collection only accounts for 15.26% of total waste, the informal sector, which employs many children, handles the rest. Factors like the inefficiency of the formal waste management system, high profitability, and lack of enforcement have allowed the informal sector to thrive.

The regulations governing waste collection in Tehran seem to incentivize violations and the employment of children. The Guidelines for Monitoring Dry Waste Collection Operations explicitly prohibit the use of minors or unlicensed foreign nationals, but violations only result in financial penalties - penalties that employers can absorb as the informal sector remains highly profitable. Overall, the policy context has created a system that enables and perpetuates child labor in scavenging.

In summary, the confluence of economic hardship in Afghanistan, sociocultural practices around marriage and family size, and discriminatory policies in Iran have all contributed to the growth of child scavenging in Tehran. The expansion of the informal waste management sector, driven by the failures of the formal system, has provided an exploitative environment where children from impoverished backgrounds are drawn into this hazardous form of labor. Addressing this issue will require coordinated efforts to tackle the underlying economic, social, and policy drivers behind child scavenging.

Scavenging and Its Social Relations

The Tehran Municipality has privatized many operations, including garbage collection, to private contractors, reducing its social responsibility for waste collectors. According to the 2012 Contract for the Transfer of Dry Waste Collection Activities, the municipality is not accountable for losses caused by contractors' performance. Oversight of contractors has been delegated to municipal districts.

Contractors have significantly contributed to the informal sector and exploitation of child labor, dividing garbage collection into morning and afternoon shifts. Morning shifts involve recycling workers collecting garbage from dumpsters and delivering it by kilogram to contractors, earning around 4,000 Rials per kilogram. Contractors also provide accommodation for these workers within recycling centers.

Afternoon shifts involve informal garbage collection, where contractors lease regions to collectors under shareholding contracts. These contractors prioritize revenue, often neglecting legal obligations like insurance, proper work tools, and housing. Consequently, they frequently employ illegal labor, including Afghan migrants and children.

A common practice is the 'custom' contract, where scavengers or their 'masters' pay a monthly fee to the district contractor for permission to collect waste. Contractors issue identification cards to facilitate activities. An 18-year-old scavenger noted, "The Recycling Company used to charge us 10 million Rials; now they take 27 million a month." Another child added, "To work, we must pay 30 million Rials as customs. If we don't pay, they will search us, and those who haven't paid will be punished."

Another employment model is the share or percentage contract, where the master and the contractor split the collected waste's proceeds. A 19-year-old collector explained, "This time, 40% goes to the master, and 60% to the recovery agency. The master pays us from his share."

In Shahrak Gharb, an affluent district of Tehran, a child scavenger detailed varying sale prices: 7,000 Rials per kilogram of plastic, 9,000 Rials for cans, and 4,000 Rials for waste metals. This pricing structure illustrates the exploitative nature of labor relations in the informal sector.

Interviews reveal that garbage collectors pay contractors between 25 million and 40 million Rials per month. With an average daily income of 710,000 Rials, they estimate a monthly income of about 18.6 million Rials, assuming they rest one day a week.

Garbage collectors are generally organized into kinship networks that help integrate new Afghan immigrants into the waste cycle. These networks organize duties and allocate accommodations, particularly in Tehran's southern districts. One participant said, "There are three of us. Everything is loaded by us. My uncle cleans the load, and my cousin and I collect more."

Scavengers use various tools, including buckets, baskets, hand carts, and vans. In the morning shift, they often use cars under recycler supervision, allowing for higher volumes of garbage collection. However, these vehicles are typically available only to those in the formal sector. Others use hand carts or shoulder sacks, with the former often confiscated by municipal officials during inspections. A 19-year-old collector stated, "City officials take my cart when they see me. I have bought over 20 carts so far, each costing 1.8 million Rials."

Some scavengers use large bins with wheels, provided by the recycling management system in certain regions. A 16-year-old collector noted, "The municipality gave these bins to Basir, who gave them to us. We fill it three or four times a day."

Risks and Consequences of Scavenging

Scavenging involves extensive work hours, high stress, poor health conditions, and environmental pollution. These factors contribute to significant risks, including physical health hazards, workplace injuries, psychological pressures, and conflicts. The most critical risks and their consequences are outlined below:

Health Hazards: Scavenging poses numerous health risks, from injuries to potentially fatal diseases. Manual scavenging and sorting dry waste often involve direct contact with sharp objects like glass and metal, increasing the likelihood of hand injuries. A 15-year-old scavenger recounted, "My hands were cut several times by pieces of glass or metal, by syringes. They are so sharp. A syringe hurt my hand recently, and I couldn't work for six days." When asked, 73% of garbage collectors reported having been injured at work. Many children lack experience with injuries and do not use protective equipment such as masks, clothes, or gloves. While 68% wear gloves, these are often of poor quality, found in trash cans, or unusable due to wetness or sweating. High healthcare costs prevent proper treatment of wounds. For instance, a garbage collector mentioned, "Once a needle opened a hole in my hand; it swelled. I applied neswar [a form of narcotic], and it healed a bit. The doctor demanded 1 million Rials for a visit."

Diseases: Inappropriate procedures lead to infections and other diseases. Workers often contract serious skin conditions during garbage collection. A 12-year-old explained, "This is leishmaniosis. It happened because of my work. I went to the doctor, and they administered five injections, but I'm still not better." Contact with debris can cause illnesses like colds, which can worsen into bronchial problems. The foul odor of waste makes children ill, preventing them from working. Scavengers suffer from kidney pain, earaches, asthma, back pain, and other maladies due to adverse working and living conditions, including poor nutrition, unsanitary water, and inadequate sleep.

Difficult Working Conditions: Garbage collection involves long hours and heavy load-handling, causing excessive fatigue. Workers may start early in the morning and continue until late at night. Poor-quality lodgings contribute to physical and mental exhaustion. High costs of illegal immigration force longer working hours to recover expenses, depriving workers of sufficient rest. A 13-year-old described, "Cleaning is hard. You can't sleep in the morning when you have to clean. You wake up tired but must do the job." Another child added, "The hardest part is insomnia; you have to work all the time, carry heavy bags, and search for garbage. Lack of sleep makes us angry."

Accidents at Work: Children face dangers when bending trash carts or bins, risking injury from collapses. A 15-year-old boy noted, "Once when I tilted the bucket, it fell and hurt my leg." Garbage collectors often ride on garbage-loaded trucks, encountering hazards during transport. One worker shared, "We work until late; we have no sleep or bath. Small children work here. We sit on the pile of garbage, exposed to cold and tree branches hitting us."

Physical Pressures: Scavenging jobs cause significant physical strain and injuries, affecting the skeleton, muscles, and skin. Workers use large sacks or hand carts to carry heavy loads, impacting children's development. In hilly areas of Tehran, using hand carts is dangerous, risking collisions with cars. One collector stated, "Hand-carts are dangerous here. If left unattended, they can hit a car, leading to damages we must pay for."

Becoming Victims of Crime and Violence: Scavengers are vulnerable to theft and violence while collecting waste. Many reported stolen property at their residences or during work. A 17-year-old described, "Our garbage and properties are stolen many times. It breaks the heart to see everything taken after a day's work." Violence from contractors, citizens, and other collectors is common. A worker explained, "If someone comes from another region, they will be punished and beaten." The figure below illustrates the different sources of violence a scavenging child may face.

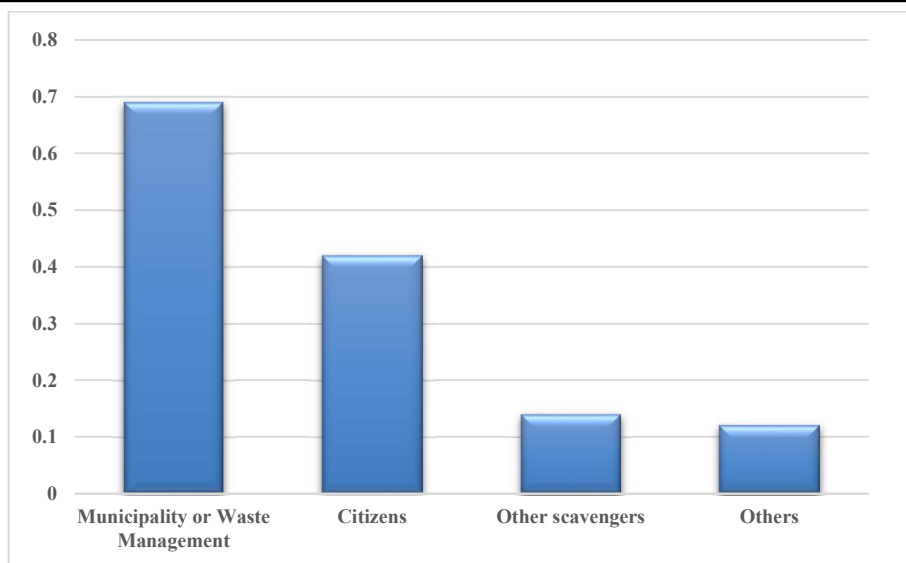


Figure 1. Perpetrators of violence against garbage collectors

Unsafe Housing and Malnutrition: Scavengers often live in makeshift shelters near waste dumps with limited access to basic services. A scavenger explained, "We rent land and live in old buildings without fresh water. We buy drinking water and use gas for heating, despite its dangers." Limited access to water, bathrooms, and safe heating exacerbates living conditions. 77% buy drinking water and 49% bathe only once a week. Long working hours prevent children from attending school or playing, contributing to malnutrition and skipping meals. The images below illustrate the dire environmental and housing situations faced by scavengers.



a)



b)

Figure 2. Pictures of garbage dumps

Social Vulnerability: The combination of immigration, hard work, poor living conditions, exposure to violence, and negative emotions makes young workers susceptible to social problems, including drug use. While not all scavengers use drugs, such behaviors are observed among them. One child noted, "They consume drugs like glass and neswar." These factors highlight the severe risks and consequences faced by scavengers, necessitating urgent attention to improve their working and living conditions.

Conclusion

Field observations in this study identified several factors contributing to the emergence of an informal scavenging sector, including poverty, discriminatory laws, inefficient urban waste-management systems, and insufficient infrastructure. Employment contracts between garbage collectors and local contractors are flawed, leading to exploitative and inhumane working conditions. This situation has caused physical, psychological, and social suffering for scavengers.

The shortcomings of the municipality and its contractors in implementing and monitoring waste-recycling laws have exacerbated the problem. Scavenging, one of the worst forms of child labor, restricts education, endangers health, and

exposes children to violence and psychological pressures. The model below illustrates the context and implications of waste management. It highlights factors such as excessive consumption, insufficient infrastructure, and lack of education for waste separation at the source, resulting in significant volumes of unseparated garbage. While regulations exist to address child labor, their ineffective implementation remains a significant problem.

Children in the informal sector rely on social networks for support and accommodation. Despite exploitation, they continue to work within these networks due to the lack of alternatives. Scavenging has severe repercussions for children, including health risks and the loss of their childhood. At an urban level, it contributes to social and environmental problems, particularly in garbage dumps and landfills.

Recommendations

Welfare-based Approach: Improve scavengers' working and living conditions without changing the status quo. This includes providing sanitary and healthcare services, safety equipment, recreational activities for children, and housing for families.

Growth-based Approach: Enhance scavengers' abilities by providing financial, physical, and educational resources. Initiatives include daycare facilities, formal and non-formal education, vocational training, alternative employment opportunities, and income-generation support.

Rights-based Approach: Create a better political space for scavengers and strengthen their societal position. This involves giving them a voice, recognizing their rights, and improving labor laws. Examples include organizing garbage collectors within cooperatives, raising awareness of child labor, and lobbying for legal reforms.

System-based Approach: Integrate the informal waste-collection sector into the formal system. This would involve including scavengers in urban and national waste-management policies, leading to better monitoring of contractors and preventing child exploitation. Adoption of the International Labor Organization's Transition from Informal to Formal Economy Recommendation (No. 204) (2015) is recommended.

Addressing the Root Causes

To address scavenging and child labor in Iran, interventions are needed both in Afghanistan and for waste management in Tehran. Poverty in Afghanistan drives migration and child labor, rooted in unequal distribution of resources, poor educational opportunities, unemployment, early marriage, high birth rates, corruption, war, and natural disasters. Improving disaster readiness, educational opportunities, and equitable resource distribution can reduce poverty.

In Iran, the expansion of the informal sector and defective waste-management methods by Tehran Municipality and the Waste Management Organization have fostered child labor. The Ministry of Labor, the Municipality of Tehran, and the Waste Management Organization should integrate the informal waste sector into the formal sector. This would allow better monitoring of contractors and prevent child exploitation. Merging the informal sector into the formal sector, abolishing oppressive laws, enhancing employment quality for adults, and supporting workers are crucial steps. Implementing the International Labor Organization's recommendations can assist in this transition.

Tehran Municipality and the Waste Management Organization must enforce waste-recycling rules and rectify their inadequacies. The Islamic Council of Tehran should oversee waste-management procedures concerning child labor. Immediate priority should be given to harm-reduction interventions, with a long-term plan to abolish child scavenging by empowering children and households.

ACKNOWLEDGMENTS: I extend my sincere gratitude to all the fieldwork staff of the research project "Traces of Exploitation in the Childhood World: Comprehensive Research on the Forms, Causes, and Consequences of Child Labour." Special thanks to Farshid Khezri for his invaluable support throughout the main research process. I also wish to thank Fatema (Baran) Mirek for her assistance in selecting materials and drafting the Farsi version of the article, as well as Danica Issell for their help with translation and proofreading. Finally, I am deeply grateful to all the research participants who generously gave their time and effort.

Conflict of Interest: None

Financial Support: None

Ethics Statement: All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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