



Research

Utilization of Secondhand Childcare products and Perceived Health Risks among Mothers of Under-Five Years Children in Ibadan Metropolis, Nigeria

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Abstract

Background: Second-hand economy is a universal phenomenon. In Nigeria, it cut across many decades and all spectrums of life even in childcare practice. The role of second-hand products in childcare practice and provisioning has been under reported in scholarly discuss in Nigeria. Hence, the prevalence of secondhand childcare products utilization, different categories of secondhand products available for childcare, the perceived health hazards and the reasons why consumers patronize secondhand products for childcare among mothers of under five years in Ibadan Nigeria.

Methods: A cross sectional concurrent mix-methods approach was used in the study. The quantitative and qualitative data were done simultaneously. While mothers of under-five children were purposively selected for in-depth interviews, a total sampling of all consenting mothers of under-five found at immunization clinic of Primary health care centres were sampled for survey. A total number of 403 mothers of under five children participated in the survey while 50 IDIs were conducted with buyers (mothers) and traders of secondhand children's products. Qualitative data were subjected to thematic analysis, while the quantitative data were analyzed with descriptive statistics and chi-square test.

Results: The mean age of mothers is \pm SD 28.6 \pm 5.4. Majority of respondents 209 (51.9%) had senior secondary education, 140 (34.7%) had tertiary education and only 2 (0.5%) had no formal education. About 339 (84.1%) utilized secondhand childcare products, while 64 (15.9%) never used secondhand childcare products. Mothers with at least senior secondary education 209 (51.9%) were found to be the highest users of secondhand childcare products. Procurement and utilization of secondhand childcare products was based on quality value, availability, affordability attached to constructed superiority of western civilization wrapped around provisioning in childcare.

Conclusion: Many mothers of under-five children in Ibadan utilizes secondhand products in childcare. Embedding secondhand products health hazard in health talk during immunization clinics will be beneficial and help in educating mothers on reduced and safe utilization of secondhand products in childcare.

Keywords: Childcare practice; provisioning; availability of secondhand products; Ibadan metropolis

Introduction

Secondhand products have become part of every-day taken-for-granted events and experiences in Nigeria. It is no news that secondhand products enhance social status enhancement and survival of many. Secondhand products are material that may have been used by previous owners or excessively produced in the global North and are exported to developing nations like Nigeria. Many studies on flea markets/economy have considered adults and its utilization, but limited studies have considered the contributions/influence of

secondhand products in childcare among mothers and attending possible health implications. Secondhand products use in childcare include panties, skirts, socks, shirts, household fabrics such as pillowcases, bed sheets, tablecloths, curtains, towels, toys, electronics among others.¹ These products materials are imported majorly from the countries such as the United States, Europe and Asia.^{2,3} The United States of America is of highest exporter of the secondhand products, followed by Germany, United Kingdom and the Netherlands. Sub-Saharan Africa where Nigeria is situated is one of the



largest importers of secondhand products among others regions like South East Asia and Eastern Europe.⁴ Historically, second hand products can be traced back to, the colonial antecedents and supremacy value as reflected even in naming children ‘Tokunbo’ (brought from overseas) among the Yoruba of southwestern Nigeria, a prestigious name given to the children conceived and/or born abroad which shows the child is from the high social class.⁵

Sequel to the Structural Adjustment Programme (SAP) that affected the economy of Nigeria from late 1980s till 1990, the importation of secondhand goods from the west, and delivery system, received increased patronage and acceptance when Nigerians moved gradually from manufacturing of goods to commerce after the adoption of the SAP in 1986.⁶ In the middle of the 1970s and early 1980s, the importation and use of secondhand items were not well known/accepted, and their supply were frequently disapproved publicly as scraps.⁷ The revenue from oil permitted civil servants and middle-class citizens to purchase new products after which there was a collapse of the commodity market in the 1980s. The industrialization commenced gradually to provide for the needs of the citizens. The textile industry employed quite a large number of people and manufactured local fabrics that were sold in and outside Nigeria.^{8,9} With the approach of the initial currency devaluation, survival in Nigeria was very difficult.⁶ The imported secondhand materials that were formally disapproved slowly turned out to be a norm.⁷ At the peak of SAP’s policy by 1991/1992, many products on the large cities in Nigeria were imported as secondhand and flea economy became prestigious in the cities like.¹⁰ Beginning in 1995, there was a sudden increase in the importation and buying of the secondhand clothes. During the SAP era, almost all socio-economic classes competed with the poor to purchase secondhand clothes and other products.⁸ Commodities such as electronics, kitchen equipment, household bags, agricultural equipment, etc were also revolving in the secondhand economy. Albeit secondhand products that are imported are called various names, they are generally regarded as Tokunbo.¹¹ In addition, durable sustenance has been built around secondhand goods in many Nigeria cities. In Lagos, Ibadan, Kano, Aba and many major urban centres, the secondhand economy thrives among people.⁵ However, the negative effects of this well-known business on the economic structure of the country have affected all places emphasizing how heightened the business has become.⁶ The purchasing power of people under the Structural adjustment programme era fell drastically; correspondingly SAP allowed many developing

countries trade on secondhand clothing.¹² Likewise, some industries argue that Structural Adjustment Programme paved the way that sunk the local textile industry as it exposed Africans to secondhand clothing which resulted in a reduction in the domestic market for African textile producers.¹³ Secondhand goods (flea) economy continues to be a very viable legacy Nigeria encounters with a western power, modernization, and capitalization in the twenty-first century.¹¹ The utilization of secondhand products keeps increasing; incidentally used products are capable of infection transfer.¹⁴ With the consumers’ increasing high demands, the trade in secondhand products is unlikely to cease or decrease in Nigeria.¹²⁻¹⁴

Secondhand products due to previous use pose serious health risks to later users.¹⁵ The identification of this fact caused the Rwanda Bureau Standard to prohibit secondhand trading in Rwanda.¹⁶ Some communicable diseases such as candidiasis, scabies, ringworm, etc can be transmitted via secondhand products.^{17,18} Likewise, there is the ability of various kinds of fabrics to retain microorganisms at different rates.¹⁹ Based on the aforementioned reasons, it is very clear that secondhand products have the intrinsic nature to keep and transmit microbes from the previous user to the next user.^{15,19}

Treatment of these clothing items with detergents and antiseptics have revealed considerable disinfection, however, the effectiveness of the disinfecting process depends on some variables which include properties of the material, the characteristics of the microbes, the surrounding temperature and humidity etc.¹⁴ Furthermore, secondhand materials are packaged, stockpiled, and kept in bales. This method gives room for cross-contamination of the materials.²⁰ Secondhand products, therefore, have a high inclination for transmission of infectious microorganisms.²¹ The Nigeria Demographic Health Survey (NDHS), 2013 and 2018²²⁻²³ recorded a relatively high infant and under-five mortality rates of 69% /128% and 67%/132% respectively. At these levels, a child among 15 Nigerian children dies before age one and one in every 8 children die before their fifth birthday, this may possibly have an inclination for the transmission of microorganisms with the use of secondhand products.

The existence of secondhand clothing is as a result of used apparels that have been made available through distribution to meet the needs and demands of the population.⁵ Approximately one third or more persons in Sub-Saharan Africa wear secondhand clothing and this reveals the high rate of secondhand clothing utilization among African countries.²⁴ Global exportation of secondhand clothing is primarily from Western Europe



and the United States.¹² The worth attached to secondhand clothing among Nigeria citizens has been centred on its popularity, a lot of people know about its durability and affordability, developed interest in it leading to the enjoyment of the products.⁵ Sub-Saharan African countries import 33.8% used clothing, 60% fabrics and new garments only account for 6.2%.¹² This makes Sub-Sahara Africa a major importer of secondhand clothing among the developing countries such as Asia which receives only 10.8%, North Africa and Middle East 7.3%, Latin America 1.8% of secondhand wears.¹²

The currency devaluation and morally bad activities in society (corruption) caused local entrepreneurs to gain the avenue and thrive in the secondhand clothing business.⁷ The trade in secondhand clothing therefore effectively contributes to the survival of many Nigerians; providing them daily income and the business in Nigeria has come to stay as it is a source of employment for the women and the youths²⁵. Government's effort to curtail the importation of secondhand goods has not been effective⁷. About 80% of Nigerians adore the business of secondhand goods, it is therefore very unlikely that the business of secondhand wears in Nigeria stops soon.²¹

Based on the facts stated above, people of all statuses and localities including those in urban cities utilize secondhand products²⁵ and these secondhand products have been found as transport media for transfer of infectious diseases.²¹ Staphylococcus aureus is commonly found in the environment and can be found especially on clothing.¹⁶ Direct contacts improve the transmission of bacteria when there is broken skin or any other openings on the surface of the skin; it causes infection.²⁶ In addition, it has been revealed that common household detergents and disinfectants have not been effective in killing some of the organisms that are isolated from secondhand products, and this predisposes the users of secondhand products to communicable diseases.²⁷ With reference to the laboratory results that there are no complete eliminations of some microorganisms in secondhand products after washing, it is very important to assess the perceived health risks of secondhand childcare products among mothers of under-five children in Ibadan Metropolis. The study hence addressed the following research questions: What are the different categories of secondhand products used for child welfare? What are the perceptions of the consumers about secondhand childcare products? What is the prevalence of secondhand childcare products utilization in Ibadan? What are the major factors that influence the use of

secondhand childcare products? What are the identified/perceived health challenges associated with the utilization of secondhand childcare products in child welfare? What are the reasons for the utilization of secondhand childcare products?

The general objective of this study hinged to examine the utilization of secondhand products among mothers of under-five children in Ibadan metropolis and the perceived health challenges in childcare.

Methods

This research employed a mixed method approach. This study made use of three purposively selected local governments which include Ibadan Northeast Local Government that has Anajere academy as a major market of secondhand childcare products, Akinyele Local Government that has Ojoo as a major market of secondhand childcare products and Ibadan North West which has Dugbe as a major market of secondhand childcare products. Ibadan North East was created by the federal military government of Nigeria in 1991. The headquarters of the council is one of the most urban local governments in Oyo State. It is bounded in the East by Egbeda and Ona-ara local governments, in its west by Ibadan North Local government, it's north shares boundaries with Lagelu and Akinyele local governments, on its south is the Ibadan South-East local government. It consists of many ethnic groups which include Yoruba, Igbo, Urhobo, Itsekiri, Ijaw, Hausa among others. Akinyele local government has its headquarters in Moniya, it was created in 1976 and shares boundaries with Afijio local government on its north, Lagelu local government on its east, Ido local government on its west, Ibadan north local government on its south. Ibadan North West has its headquarters at Dugbe/Onireke. It was created in 1991. It is bounded on its north by Ido local government, on its west by Ibadan South East local government, on its east by Ibadan north east local government and on its south by Ibadan south east local government.

The target population for this study included all mothers of under-five children, the buyers, and traders of secondhand childcare products in the selected areas.

Sampling Technique: A mixed method approach was adopted for this study. The quantitative method involved the use of semi-structured interviewer administered questionnaires to collect information from mothers of under-five children and the qualitative method involved the use of in-depth interview guide to collect information from some purposively selected buyers (mothers) and sellers of secondhand childcare

products. A total sampling of 403 including all consenting mothers of under-five children found in selected primary health care centres were included in the study. Likewise, data were collected from 24 sellers and 26 buyers (mothers) who were purposively selected for an in-depth interview, in all a total of 50 IDIs conducted.

Results

Among the 403 respondents, 120 (29.8%) were less or equal to 25 years, 251 (62.3%) were between 26 and 36 years, 32 (7.9%) were 37 years and above. Mean \pm SD 28.6 \pm 5.4. Majority of respondents 209 (51.9%) had senior secondary education, 140 (34.7%) had tertiary education and only 2 (0.5%) had no formal education. The users of secondhand childcare products include mothers with no formal education 2 (0.5%), mothers with primary education 40 (9.9%), mothers with junior secondary education 12 (3.0%), mothers with at least senior secondary education 209 (51.9%), and mothers with at tertiary education 140 (34.7%). Majority of the respondents 362 (89.8%) were Yoruba, 17 (4.2%) Igbo, 2 (0.5%) Hausa while others were 22 (5.5%). Majority of the respondents 402 (99.75%) were married while only 1 (0.2%) was a single mother and 358 (89.1%) had a monogamous family while 44 (10.9%) had a polygamous family. In all a total of 111 (27.4%) mothers had monthly income above #30,000 while 34 (8.4%) had monthly income less than #5,000.

Table 1: Respondents Socio-demographic Characteristics

Characteristics	Frequency (%)
Age	
≤25	120 (29.8)
26-36	251 (62.3)
37-above	32 (7.9)
Mean \pm SD	28.6 \pm 5.4
Religion	
Christian	184 (45.7)
Muslim	219 (54.3)
Education	
No formal education	2 (0.5)
Primary	40 (9.9)
Junior Secondary	12 (3.0)
Senior Secondary	209 (51.9)
Tertiary	140 (34.7)
Ethnicity	
Yoruba	362 (89.8)
Igbo	17 (4.2)
Hausa	2 (0.5)
Others	22 (5.5)
Marital Status	

Single	1 (0.2)
Married	402 (99.75)
Years in Marriage	
≤1	70 (17.5)
2-5	133 (33.2)
6-above	198 (49.4)
Number of Children	
1-2	167 (41.4)
3-4	117 (29.0)
5-above	119 (29.5)
Number of Children	
1-2	167 (41.4)
3-above	107 (26.6)
Family Type	
Monogamous	358 (89.1)
Polygamous	44 (10.9)
Residential Area	
Rural	397 (98.7)
Urban	44 (10.9)
Monthly Income	
≤5000	34 (8.7)
5100-15000	124 (30.8)
15100-30000	134 (33.3)
30100-above	111 (27.4)

Prevalence of secondhand childcare products utilization among mothers of under-five children in Ibadan Metropolis

Among the 403 mothers of under-five children interviewed, 339 (84.1%) utilized secondhand childcare products, while 64 (15.9%) never used secondhand childcare products. The prevalence of secondhand products among mothers of under-five children in this study is 84.1% as shown in table 2 below.

Table 2: Prevalence of secondhand childcare products among mothers of under-five children in Ibadan Metropolis

Question	Frequency (%)
Do you use secondhand childcare products for your child	
Yes	339 (84.1)
No	64 (15.9)

Categories of secondhand childcare products among mothers of under-five children

The categories of secondhand childcare products used among mothers of under-five children in Ibadan metropolis can be grouped as follows:



Baby clothes: cardigan, socks, tops, shirts, skirts, trousers, knickers, singlet, shoes, overall/pin-under, gowns, pants, cap, towel

Toys: bicycle, train, doll, ball, teddy bear, kite, rubber, aeroplane, crayons, rocking horse, car, drums

Diapers: diaper bag, nappies, soft washcloths

Baby bedding: mattress pads, crib sheets, blankets

Baby gear: Baby stroller, swing, carrier, car seat, highchair

This categorization of secondhand childcare products was further corroborated by IDI participant as stated below:

I use secondhand products, but I don't use secondhand toys. Tops, trousers, knickers, cardigan, pin-under. I use new toys like a teddy bear. My sister-in-law send my children new toys like bicycle, football, rocker, Walker – (30 years, User, Apata, IDI)

Another respondent added that:

I use secondhand products like trouser, tops, socks, cap, flannel, napkin, singlet, pant, cardigan, overall, car, teddy bear – (28 years, User, Agbowo, IDI)

The emphasis was further laid by some other respondents as stated below:

I use secondhand products Cardigan, jumpsuit, socks, pop socks, cap, skirt and blouse, shirt – (20 years, User, Idi-Ikan, IDI 23)

I don't use secondhand toys, but I buy and use Jeans, top, chiffon material, polo material, gown, cardigan, cap, socks for my children – (39 years, User, Ologun-eru, IDI)

Reasons for the utilization of secondhand childcare products among mothers of under-five children

Reasons for utilization of secondhand childcare product among mothers of under-five years children in Ibadan varies and these were shown thus: 1 (0.6%) perceived it as cheap, 78 (47.9%) perceived it has quality, 2 (1.2%) perceived it has quality and fitness, 6 (3.7%) perceived it as unique, 9 (5.5%) perceived it has fitness, 2 (1.2%) just like it. This finding is supported by in-depth interview findings where the majority of the respondents perceived secondhand products as good for use, affordable and cheap. One of the in-depth interview respondents, a secondhand childcare product seller opined that;

It is in the olden days that people feel ashamed; nowadays people are proud especially first grade users – (35 years, Seller, Dugbe, IDI)

The above view was further corroborated by another secondhand trader thus;

I advertise that I sell secondhand products. I feed myself and family on this same business. I have trained my children up to grown up on this same business. If the government stops the business, they are killing millions of people. Secondhand product is not a sin – (60 years, Seller, Ologun-eru, IDI)

Other views supported the above and also added how the quest of provisioning in childcare is alleviated by availability of secondhand products

It is in the olden days when the economy was good that people feel ashamed of using secondhand. It has now become a fashion. Both old and young are involved in usage. I'm currently wearing secondhand from top to bottom: – (40 years, Seller, Aleshinloye, IDI)

And this:

It can be selected then a new product that is why most pregnant women go for secondhand products. New products will just be few. Fits the child, moderate in size than new products – (29 years, Seller, Academy, IDI)

It is not a bad thing to use secondhand products. It depends on likeness. There are people that don't like it but if you admire something, you can buy – (25 years, Seller, Dugbe, IDI)

We are in Nigeria; people know that it is what people use every day and it is not written on it as a secondhand product. Whatever is found at boutiques can be seen in secondhand stores – (20 years, Seller, Eleyele, IDI)

In addition, majority of the respondents use secondhand childcare products due to affordability, quality and protection from cold (thickness of the materials) as shown in table 3 below. This is supported by the finding from an in-depth interview where a seller opined;

Secondhand childcare products are not as expensive as new, secondhand products are cheaper, last, not easily seen anywhere. ₦15,000 house toy as new is just sold for ₦4000 or ₦5000 and contents are still intact, the durability of secondhand products than new products – (31 years, Seller, Eleyele, IDI)

Other perspectives on reasons re represented in the diagram below

REASON WHY MOTHERS PROCURE AND UTILIZE SECOND HAND PRODUCTS FOR CHILDCARE

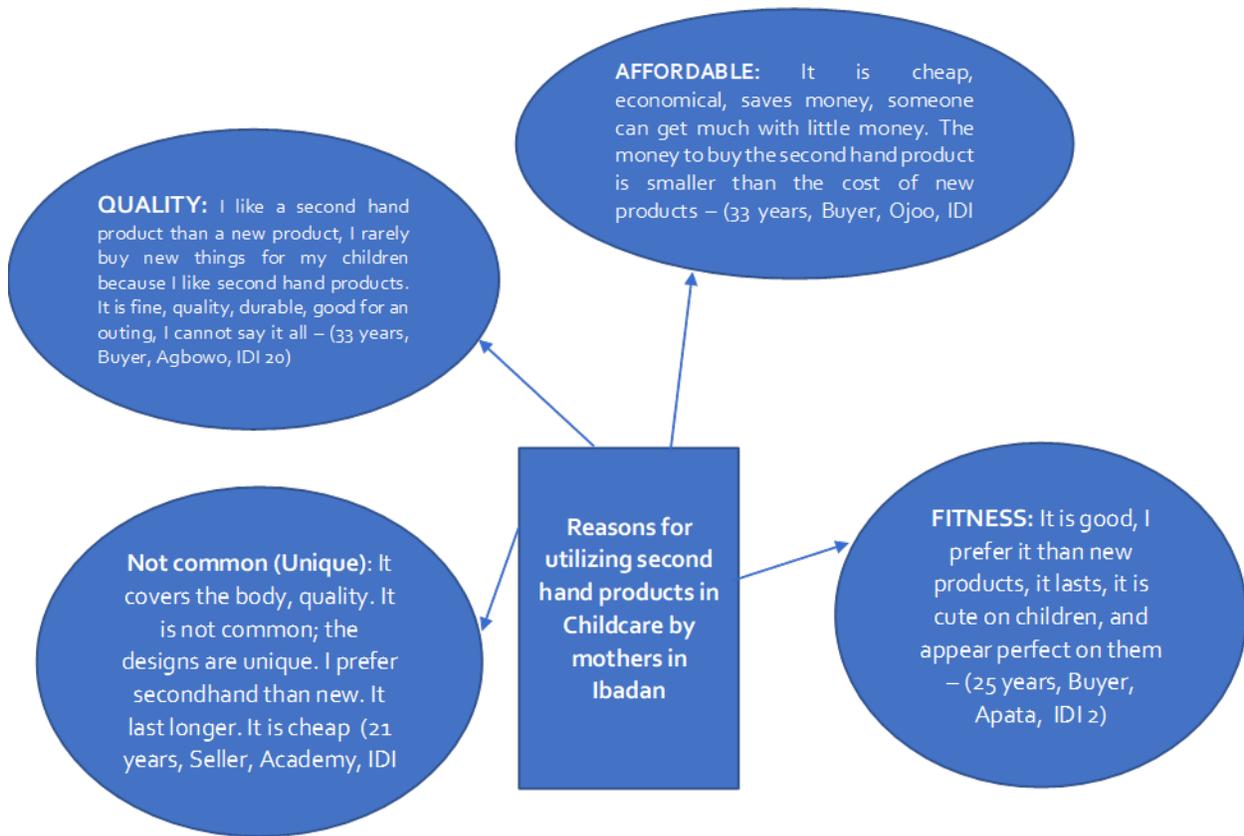


Table 3: Reasons for utilization of secondhand childcare products among mothers of under-five children

Advantages of secondhand childcare products	Frequency (%)
Cheap	40 (17)
Fitness	20 (8.5)
Quality	167 (71.6)
Not common (Unique)	7 (2.9)

Perceived health risk of secondhand childcare products among mothers of under-five children

Majority of the mothers of under-five (73.6%) perceived secondhand childcare products have germs, while many mothers (50.1%) perceived secondhand childcare products can cause sickness in children. However, a lower proportion (34.4%) have reason to stop utilizing secondhand childcare products while the majority (60.8%) have no reason to stop utilizing secondhand childcare products because they wash every time before

using it. This finding is corroborated by results from an in-depth interview where a buyer opined; *Children can contact infection through previously used products. The preservative can cause infection* – (20 years, Buyer, Eleyele, IDI)

Another mother think “It is God that is protecting us all. There is no place where someone cannot contact infection. In school, children contact infection. Once the school resumes, because cough and catarrh are airborne, I treat catarrh and cough for my child. So, anything can be contacted anywhere. My prayer is just that our children should not contact anything bad” – (30 years, Buyer, Agbowo, IDI).

In addition, a mother revealed that: *My child has had skin infection before but not due to secondhand product use. My child has never reacted to a secondhand product* – (36 years, Buyer, Idi-ikan, IDI).

This was also reiterated by another set of mothers that: It is possible to cause the transfer of infection because it takes months to be transported, stocked in the heat; it is possible for a



child to get an infection if not thoroughly washed. We don't know the health status of the previous users; therefore, infection is possible – (31 years, Buyer, Agbowo, IDI).

If secondhand products are not washed before using can cause infection because of the chemicals used in preserving the products – (29 years, Buyer, Ojoo, IDI).

Secondhand products can cause rashes – **(25 years, Buyer, Moniya, IDI)**. *Children can contact infection especially rashes. When I was selling chiffon tops and I hang on my arm while hawking, I usually have rashes on my arm. If not washed before using can cause rashes. Make sure you wash before use – (33 years, Buyer, Odo-ona kekere, IDI).*

If secondhand products are not treated properly can cause a transfer of infection. *It is not good to buy and use for children before washing because if the child wanted to be sick due to other reasons before, the thought would go easily to what was used for the child – (30 years, Buyer, Ojoo, IDI)*

Secondhand products can have germs, but I cannot specifically mention names – (30 years, Buyer, Apata, IDI).

Many mothers emphasised the importance of washing and disinfecting before use as narrated below in some of the responses:

Once secondhand product is washed with disinfectants, no problem among children. Doctors and nurses that should run away from it are the major buyers up to bra and pants. If it has any stains, I don't keep as stock – (52 years, Buyer, Idi-ishin, IDI)

Another mother emphasis that non-clothing secondhand products carry no danger as expressed thus: *From wears, children can contact infection, but bags and toys are not as sensitive. Toys don't need washing depending on choice – (23 years, Buyer, Felele, IDI).*

Many mothers also argued that if washed and sun-dried secondhand products cannot transmit infection as reflected in some statements quoted below:

It depends on care. I wash it before I use and on the children. Wash and sun-dry, any germs will be eliminated. Pants especially should be washed – (40 years, Seller, Agbowo, IDI)

Another respondent who seems to be protective of her livelihood added that:

Children cannot contact infection once washed but some people don't wash. It doesn't need disinfectants – (35 years, Seller, Moniya, IDI)

Other sellers from different markets also argued that certain products cannot transmit infections as stated below:

Children cannot contact infection. Their immunity is low therefore wash before use. Adults too wash and washing ascertains that any problem is gone. Add soap and disinfectant, it kills germs inside. Soap alone might not be effective – (46 years, Seller, Ojoo, IDI)

'There is none that can cause infection except pants. They have been prewashed including pants, only that pants usually need special treatment – (35 years, Seller, Academy, IDI)

It is very good for children after washing. There is no infection transfer. My child used secondhand childcare products the first day I delivered. The new product I bought was not used on the child that day – (22 years, Seller, Ososami, IDI)

Another respondent identified countries of origin of secondhand clothes as determinants for infection transmission:

Children cannot contact infection through the utilization of secondhand childcare products. It depends on the country that packed the bales. A bale that is from the UK cannot cause infection for children. China secondhand products can cause infection for children being that they are not always neat. We sell UK because it is first grade – (38 years, Seller, Apata, IDI)

Some respondents believe that secondhand product cannot transmit infection to children even when not disinfected/washed.

Children cannot contact infection even without washing. I have picked my children church wears and I'm not ready to wash before use. If it is without stains, there is no need to wash – (35 years, Seller, Dugbe, IDI)

Some customers wear before buying. *Wash before use but no problem if you don't wash – (21 years, Seller, Academy, IDI)*

Secondhand products can be used without washing but personally, I wash before using. If there is time, we wash stock before selling – (23 years, Seller, Felele, IDI)

Secondhand products can not cause the transfer of infection even if not washed except pants because the previous user's health not known – (22 years, Seller, Ososami, IDI)

Table 4: Perceived health risk of secondhand childcare products among mothers of under-five children

Question	Freq (%)		
Do you think secondhand childcare products contain germs			
Yes	295(73.6)		
No	76(19.0)		
I don't know	30(7.5)		
If yes, can you mention some of the likely infection?			
HIV/AIDS	4(4.8)		
Odour	2(2.4)		
Rashes	11(13.4)		
Skin spot	2(2.4)		
I don't know	63(76.8)		
Do you think frequent use of secondhand childcare products can cause sickness in children			
No	169(42.9)		
Yes	201(50.1)		
I don't know	31(7.7)		
Do you have any reason to stop use of secondhand childcare products?			
No	242(60.8)		
Yes	137(34.4)		
I don't know	19(4.8)		
Do you use secondhand childcare products from day of delivery			
Yes	84(21.0)		
No	316(79.0)		
Question	Agree	Disagree	I don't know
Children can easily contact infection	282(70.1)	109(27.1)	11(2.7)
Previously used items can cause infection in children	229(57.5)	125(31.4)	44(11.1)
My child frequently has skin infection	6(1.6)	268(96.6)	7(1.8)
My child became sick after introducing secondhand childcare products	-	373(98.9)	4(1.1)

Factors that influence the utilization of secondhand childcare products among mothers of under-five children

Among the variables, age (0.038) and number of children (0.015) were found as significant factors that influence the utilization of secondhand childcare products. This

finding is corroborated by the result from an in-depth interview where a seller opined:

Because new products are expensive. *With ₦3500 I can only buy one new material, but I can buy several secondhand products. Someone like me with 6 children – (40 years, Buyer, Dugbe, IDI).*

In addition to age and number of children, many mothers pointed out that quality and durability were also important reasons that patronize secondhand products. The factors of quality and durability at affordable price cut across many responses as exemplified below:

It is washable, it is out wear, it is useful, it is not obvious as secondhand. People can think it is new– (45 years, Buyer, Dugbe, IDI)

Also, these responses were added pointing to price as another factor that influence utilization of secondhand products as reflected below:

People are buying more especially during the festive season because it has quality, fitting – (38 years, Seller, Academy, IDI)

The increase in demand and supply is due to the economic situation of the country. *It is now expensive too, but people still buy due to quality, although it is still considerably cheaper than new products. A new material that I bought for my son at ₦2700, I sell a similar product at ₦800 or ₦1000, after wearing it once, it started depreciating. I had to show the seller but gave the opinion that it has been in the store for a long time whereas secondhand products cannot depreciate like such – (49 years, Seller, Ogunpa, IDI)*

The increase in usage is because many people have tried new products and realized it doesn't last like secondhand products – (52 years, Seller, Mokola, IDI)

People believe in the quality of secondhand products and last longer than new products – (31 years, Buyer, Eleye, IDI)

Many mothers were pushed by quest for quality, durability, and affordability to obtain and utilized secondhand products in childcare.

Discussion

This study showed that the majority of under-five mothers (84.1%) utilize secondhand childcare products for their children, it aligns with Nworie et. al,²¹ position that a greater proportion of Nigerians revere the utilization of secondhand products, and this adoration makes the demand and supply of secondhand products unlikely to stop. The Nigeria Demographic and Health Survey (NDHS)²³ recorded increased under-five years mortality rate from 128 death per 1000 live births in 2013 to 132 death per 1000 live births in 2018, few studies have directly related infant morbidity and mortality to handling and utilization of secondhand products, however, there may be a relationship between morbidity and utilization of secondhand childcare



products and eventual mortality from infections contracted, thus contributing to Under-5 children morbidity and mortality indicator. As argued by Muthiani et al. that their microbial analysis of secondhand products gives a strong inclination of secondhand products causing diseases among children clothing and toys are highly vulnerable to microbial contamination because of constant exposure to soiling and this improves the transmission of microbes from one person to another.¹⁴

The prevalence of secondhand products utilization is 84.1%. Large proportions of people are involved in the buying of secondhand products similar to the outcome of a study by Muthiani et al and Areo and Areo.^{14,25} Secondhand products business provides daily income as it is a source of employment for women and youths. Correspondingly, despite the acceptance of secondhand products, these are the capable transmission of communicable diseases¹⁴ as a result of previous use; secondhand products have health implications to the later users Agbulu.¹⁵

Majority of mothers (96.3%) washed secondhand childcare products before using them which shows they have the perception of likely harm that might be present on the products if used without washing them. However, many respondents from the in-depth interview perceived no health problem if secondhand products are used without washing. Majority of mothers (62.7%) perceived washing with soap or detergent alone will not eliminate all germs. However, some (37.5%) perceived the effectiveness of soap or detergent in eliminating all germs, it shows that many mothers are unaware that some germs defile washing and can still be transmitted even after been washed. However, a few (13.4%) reported the utilization of secondhand products before washing either by test running the products or checking fitness. This shows that some mothers didn't associate any risk of infection to secondhand products, this view is similar to many Sellers opinion of secondhand childcare products reinforced no problem can occur if secondhand childcare products are used without any form of treatment. Majority of mothers (79%) were cautioned to use secondhand childcare products at birth due to possible health implications, they perceived newborn should not be exposed to previously used products until after many weeks of delivery and for spiritual explanations which corroborate the explanation of respondents, but some mothers (21%) used for their newborn from the day of delivery. A considerable number of mothers (73.6%) perceived the ability of secondhand childcare products transferring germs but continue the usage and 40.8% of mothers

preferred secondhand products than new products. This response supports findings of Brione et al.²⁸ the decision to purchase secondhand products makes many buyers not to outweigh the likely risks associated with the utilization of secondhand materials.

Utilization of secondhand childcare products in this study includes affordability, this also corroborate the argument of Amubode and Braide²⁹ that affordability is one of the strong factors that have encouraged the resilient utilization of secondhand products. Many people have a strong affection for foreign products and the corresponding economic melt-down which prevents affordability of new foreign products encourage the acceptance and utilization of secondhand products without serious consideration given to any health consequences agreeing with Areo and Areo, and Olajubu et al.^{25,27}

Price of a commodity is a major indicator why people patronize secondhand products since it is reasonable to buy a secondhand material in a good condition which serves the same function a new commodity does at a cheaper price agreeing with Yusra et al.³⁰ When the cost of a product is high, people look for alternatives to the products. Another major reason for the utilization of secondhand products is quality, this is supported by Louis and Lombart³¹ where the brand was found as a powerful influence on consumers' behaviour. Quality creates an image in the mind of buyers, it is a symbol of trust in the product. Many respondents from this study purchased secondhand products to satisfy their interest in the quality of a product also agreeing with Wu et al.³² Qian,³³ found out that quality of a product or service is desired by consumers, they are not ready to buy at a high cost, which is a reason why many buyers of secondhand products enjoy quality at a lower rate. Olajubu et al., Solomon et al,³⁴ further reinforced quality outstanding price as a principal motivator for the utilization of secondhand products without giving much concern to any potential health risks. In agreement with the earlier studies, the quality was a major stimulant for the utilization of secondhand childcare products. People of all available educational levels utilize secondhand childcare products in this study. This complements the findings of Areo and Areo, where people of all statuses and localities including the urbanites utilize secondhand products.

Secondhand products were formerly seen as uniquely for low- and medium-income population Amubode and Braide the findings from this study showed that all statuses including the high classes patronize secondhand products complementing Areo and Areo. Some of the



participants of IDI opined those secondhand products are no more *bosikoro* meaning good marketed in secret, but it is now an open business because many people nowadays know about it and accept it. “It was bend-down select” when it was not valued, nowadays there are enhanced methods of displaying secondhand products such as hanging and putting on shelves”, this statement comparable to Ikorupo, secondhand products previously disapproved turned out to be a norm among people. People especially first grade users are proud of utilizing secondhand products, according to the seller of the secondhand product; it is a good means of livelihood. Meanwhile, many studies Nworie et al, Nan, Shafrizada, and Bloomfield^{18-19,21,35} have shown the tendency of secondhand products to retain microorganisms even after washing with soap or detergents. Buyers and sellers in this study claimed to use secondhand products without any form of treatment.

All the users from this study stated that they have never experienced any form of a problem after using any secondhand childcare products; however, some of the adverse manifestations might not be immediate for the users to associate the symptoms as an outcome of secondhand products utilization. The study was done by Olajubu et al., stated that there are no available data that showed the relationship between utilization of secondhand products and development of disease or disease outbreaks, the microorganisms that have been isolated are the basis of some disease conditions. Awe and Abuh,³⁶ also found that the previous contact with the owner's skin and the diverse origin of the individual products make secondhand products reasonable to expect possible microbial contaminants. Amubode and Braide similarly stated that secondhand products often emit unpleasant odours while the buyers make their selections, and this forms a strong basis for many respiratory problems. A study by Olajubu et al, correspondingly revealed that detergents and disinfectants have not been effective in killing some of the organisms isolated from secondhand products, there is a predisposition of the users to communicable diseases. Atubu, likewise found that direct contacts improve the transmission of bacteria, especially when there is a broken skin or any other openings on the surface of the skin, which is a likely occurrence among secondhand products users. Similarly, Nester et. al., opined that handling of secondhand products from packaging, stockpiling, and baling gives room for cross contamination of the materials which further exposes the users to microorganisms. For instance, *Staphylococcus aureus* is a bacterium commonly found in the environment and due to handling can be found on

used products Kamana, but many mothers (21.4%) couldn't associate any specific microorganism that can be transmitted through secondhand products. There are health hazards that can be transmitted through the utilization of secondhand products especially microorganisms causing skin infection.^{18,21,35,37}

Many respondents were of the opinion that there are possibilities of infection transfer among users of secondhand products, but the usage continues because it is affordable, and any adverse effects can be treated. This corresponds to findings of Amubode and Braide. Many respondents of this study buy secondhand products because it is not common, a means of wearing designers. Many respondents opined emission of odour from the secondhand product is one of the major disadvantages of its utilization. This odour has an inclination for respiratory problems such as catarrh; a similar to the finding of Amubode and Braide, Many buyers and sellers from this study didn't wash secondhand products before using them especially when they saw it as neat and without stains. This response agrees with Areo and Areo, where 61% opined that there is no necessity to wash secondhand products before utilization because most of the secondhand products have been washed and disinfected before they were exported into the country, about 37% were of the opinion that they could contact communicable diseases such as skin infections if the wears are not washed and disinfected before usage. 41%, therefore, washed their purchased secondhand clothing before usage and 50% of buyers revealed that they do not give secondhand clothing any treatment before usage²⁵.

In-depth interview of many sellers of this study displayed secondhand products attractively for instance by cleaning and hanging or packaging similar to finding by other studies that a marketer performs the activity of creating positive symbolic image of a product so that consumers can be attracted also Olajubu et. al., who deduced that most secondhand products are displayed attractively which makes some buyers not to see any importance in washing before using while few wash the secondhand products before using. This marketing strategy made them perceive secondhand products like new.

Some respondents of this study utilized secondhand products because children rapidly outgrow products and it is a means for casual use similar to the finding of Waight³⁸ that secondhand childcare products which includes baby clothes, toys which extends beyond the first users because children are rapidly growing and within days, they can outgrow a newly purchased



product, the product still retaining its quality when the child has outgrown its usefulness. According to Mintel³⁹ Guiox and Roux⁴⁰⁻⁴¹ one in five parents make use of secondhand childcare products and it is a means of keeping money for other family expenditures, similar to the outcome of this study because many mothers opined that secondhand childcare product are cheap, and this will be a means for them to save for other needs. The money for new products can buy up to three or more of the secondhand products and this can be cost-effective when more than one of a particular product is needed.

Significance of the findings

The findings of this study are significant to child health care discourse. The study identified secondhand economy as a contributor to provisioning in childcare and also as a possible factor in child morbidity in Ibadan, Nigeria. The study revealed a high prevalence of utilization of secondhand childcare products among mothers of under-five children in Ibadan Nigeria. Many mothers have general knowledge that use of secondhand products in childcare can transmit infection to children but many of them do not know specific infection that can be contracted. There is also a level of shared ignorance on the mode of transmission and contraction of infections associated with use of secondhand products among the study population. the provisioning, quality of product and price in terms of affordability were the major factors identified that influence the utilization of secondhand childcare products, it is therefore important that government should encourage policies that will enhance availability of locally produced materials by improving quality of products at affordable price with special monitoring from standard organization of Nigeria (SON). This will encourage mothers to patronize newly manufactured, unused and safe childcare products.

Limitation of the study

In this study, the issue of labelling/stereotype associated with secondhand products were addressed to minimize biases and incorrect responses. In the course of data collection some mothers were initially hesitant to respond on secondhand utilization, but the team were able to explain with cogent examples around them the reality of secondhand economy in our today existence. We also made it plain and assured them that the data were for academic purpose and confidentiality will be highly observed even when publishing the finding. They subsequently agreed to participate in the study.

Conclusion

Provisioning is a major driver for secondhand products utilization in childcare, gear towards ensuring well-being of the young ones and also as a norm emphasizing importance of children in many societies. Many mothers with desire to provide affordable and good quality product for their children but are unable to afford it brand new version have found solace in Secondhand products with limited or no consideration for its possible health consequences on children. Utilization of secondhand childcare products is not limited to the low-income groups; it is also utilized by some middle- and high-income groups of mothers. This implies that utilization of secondhand products cut across classes and culture in Ibadan, Nigeria. Many mothers were aware and knowledgeable about the possible health risks associated with the utilization of secondhand products in childcare but were unable to stop its usage because of the affordability and quality. Hence, educating mothers on possible and specific health implications of secondhand products in childcare is urgently important to ensure healthy lives and promote wellbeing for all age of children. Hence, embedding secondhand products health hazard in health talk during immunization clinics will be beneficial and help in educating mothers on reduced and safe utilization of secondhand products in childcare.

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