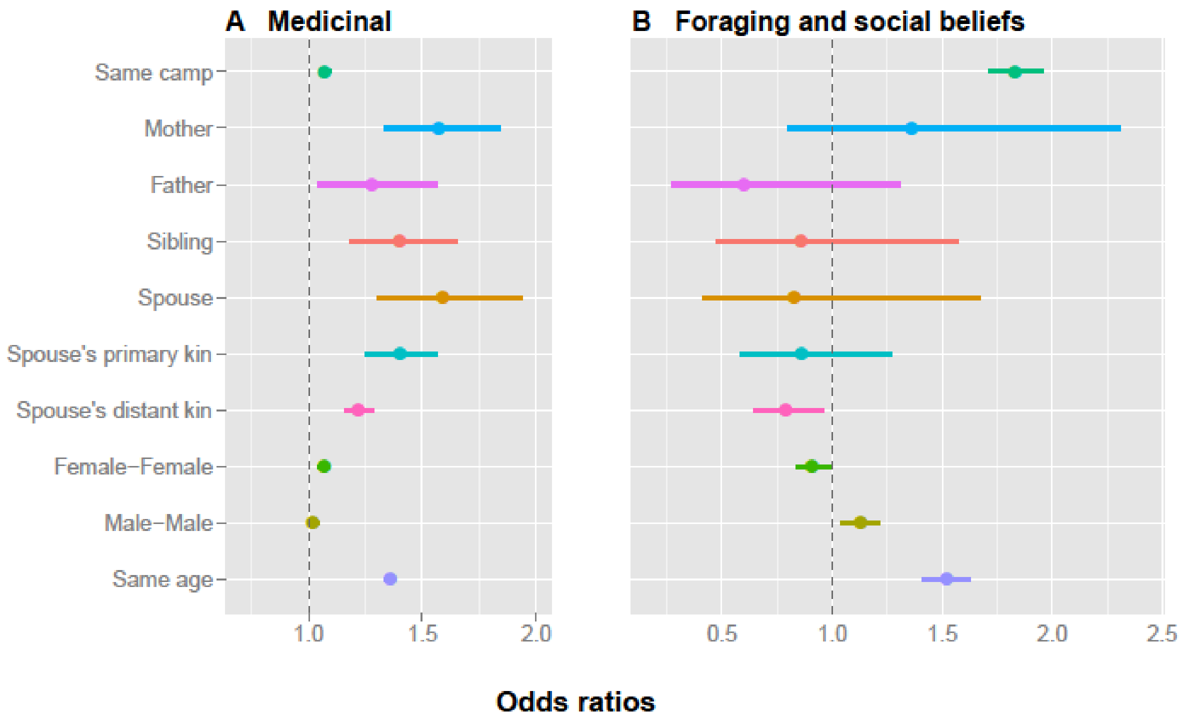

Figure S1. Odds Ratios for the Predictor Variables. Response variable is reported co-occurrence of plant use for (A) medicinal purposes or (B) purposes related to foraging and social beliefs. The dots show the odds of co-occurrence of plant use when individuals in a dyad belong to the same camp; have one of the following biological kin ties: mother, father, sibling; have one of the following affinal kin ties: spouse, spouse's primary kin, or spouse's distant kin; are females; are males; belong to the same age group. Error bars show 95% confidence intervals. Related to Figure 2; odds ratios are based on Model 2 in Tables S2-3.

Table S1. List of plants, their use by other Pygmy populations, chimpanzees and gorillas and known biological activity. Related to Figure 1.

Common Mbendjele BaYaka name	Genus	Species	Gorilla use	Chimpanzee use	Which Pygmy group	Known biological activity	References
Banga	Autranella	congolensis	0	0	CB, DRC-M, DRC-E, Cam-Bak	1	[S1–S4]
Boyo	Entandrophragma	cylindricum	0	0	Cam-Bak, CB, DRC-M, DRC-E	1	[S3–S5]
Bulaki	Caloncoba	welwitschii	1	0	CB	0	[S3,S4,S6]
Ekoka	Thomandersia	hensii	1	0	CA, CB	1	[S4,S7,S8]
Embondo	Milletia	laurentii	0	1	NA*	1	[S3,S9–S11]
Euey	Rauvolfia	vomitoria	0	0	Cam-Bak, DRC-E, CB	1	[S3,S12–S14]
Guka	Alstonia	boonei	0	1	Cam-Bak, Gb, DRC-E, DRC-M,CB	1	[S1,S9,S12,S14–S16]
Iboko	Dioscorea	smilacifolia	0	0	DRC-M, DRC-E, CB	0	
Imbanda	Erythrophleum	ivorense	1	0	Cam-Bak, CA, DRC-M,CB	1	[S12,S15,S17]
Imbenya	Unknown	Unknown	NA	NA	NA	NA	NA
Imbi	Marantochloa	congensis	1	1	CA, DRC-E, Cam-Bak, CB, DRC-M	0	[S7,S9]
Indengo	Croton	haumaniamus	0	0	Gb, DRC-M,CB, DRC-E	0	[S3,S15]
Jongo	Ricinodendron	heudelotii	0	0	DRC-E, Cam-Bak, CB, DRC-M, CA	1	[S3,S18,S19]
Kokosa	Cyathula	prostrata	0	0	DRC-E, Cam-Bak, CB	1	[S4,S17,S20]
Kombo	Musanga	cecropioides	0	0	Cam-Bak, DRC-M, DRC-E, CB	1	[S1–S4,S12]
Kungu	Piptadeniastrum	africanum	0	0	Cam-Bak, Gb, DRC-M, DRC-E, CB	1	[S4,S12,S15,S21,S22]

Mobey	Anonidium	mannii	1	0	Cam-Bak, Gb, DRC-E, DRC-M, CB	1	[S1,S2,S4,S12,S15]
Mokakake	Costus	sp. (afer or lucanusianus)	1	1	Cam-Bak, Gb,DRC-E, DRC-M, CB	1	[S4,S6,S9,S12,S15,S23]
Mokata	Garcinia	punctata	0	0	Cam-Bak, Gb, DRC-E, CB	1	[S1,S2,S4,S12,S15]
Mongamba	Dichostemma	glaucescens	0	0	DRC-E, Cam-Bak,CB	1	[S2–S4,S16]
Mopo	Millettia	sanagana	0	0	NA*	0	[S3]
Mosombo	Irvingia	grandifolia	0	0	Cam-Bak, CB	1	[S3,S4,S12,S24]
Mototoko	Picralima	nitida	0	0	Cam-Bak, Gb, DRC-M, DRC-E,CB	1	[S3,S4,S8,S12,S15]
Muese	Nauclea	diderrichii	1	0	Gb, DRC-M, CB	1	[S3,S4,S6,S15,S25]
Moba	Pentaclethra	macrophylla	0	0	Cam-Bak, Gb, DRC-E, DRC-M,CB	1	[S4,S12,S15,S17,S23]
Ngata	Myrianthus	arboreus	1	1	Cam-Bak, DRC-M, CB, DRC-E	1	[S2–S4,S6,S7,S9,S12,S26]
Somboli	Penianthus	longifolius	0	0	Cam-Bak, DRC-M, DRC-E, CB	1	[S1–S4,S27]
Toko	Eriocoelum	macrocarpum	0	0	CB	0	[S4]
Mongo	Zanthoxylum	tessmannii	0	0	Cam-Bak, Gb, CB	1	[S3,S12,S15,S28]
Mokula	Microdesmis	puberula	0	0	Cam-Bak, Gb, CB	1	[S3,S12,S15,S16,S29]
Juese	Trema	orientalis	0	1	Cam-Bak, CB	1	[S3,S12,S30–S32]
Mongangai	Unknown**	unknown	NA	NA	NA	NA	NA
Njobe	Strombosia	grandifolia	0	0	CB	0	[S3,S33]

CA= Central Africa, Aka; Gb= Gabon, Baka; Cam-Bak= Cameroon, Baka; CB= Congo-Brazzaville, Mbendjele; DRC-M= Mbuti, DRC; DRC-E= Efe, DRC

*Many cases of Milettia use in the Aflora database, but the species are unknown.

** Maybe Alchornea sp.

Table S2. Results from mixed effects logistic regression models on probabilities of reported co-occurrence of medicinal plant use. Related to Figure 2.

		Model 1				**Model 2**				**Model 3**	
	Percentage in dyads with the same plant use	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**	**ODDS (CI)**	**P**
Intercept		0.15 (0.15, 0.15)	1.00	0.00	0.13	0.15 (0.15, 0.15)	1.00	0.00	0.13	0.16 (0.16, 0.16)	0.00
Same camp	34%	1.06 (1.04, 1.08)	1.05	0.00	0.14	1.07 (1.05, 1.1)	1.06	0.00	0.14		
Same age group		1.36 (1.33, 1.39)	1.30	0.00	0.17	1.36 (1.33, 1.38)	1.29	0.00	0.17	1.36 (1.33, 1.39)	0.00
Female-female		1.07 (1.05, 1.09)	1.06	0.00	0.14	1.07 (1.04, 1.09)	1.06	0.00	0.14		
Male-male		1.02 (1, 1.05)	1.02	0.08	0.13	1.02 (1, 1.05)	1.02	0.06	0.13		
r (0.25 increase)		1.22 (1.17, 1.27)	1.19	0.00	0.16					1.25 (1.2, 1.31)	0.00
Mother	0.4%					1.57 (1.33, 1.84)	1.46	0.00	0.19		
Father	0.2%					1.28 (1.04, 1.56)	1.23	0.02	0.16		
Sibling	0.4%					1.4 (1.18, 1.65)	1.33	0.00	0.18		
Spouse	0.3%	1.61 (1.32, 1.96)	1.49	0.00	0.20	1.59 (1.3, 1.94)	1.48	0.00	0.19	1.64 (1.34, 2)	0.00
Spouse's primary kin	0.9%	1.41 (1.26, 1.58)	1.34	0.00	0.18	1.4 (1.25, 1.56)	1.33	0.00	0.18	1.46 (1.31, 1.63)	0.00
Spouse's distant kin	3%	1.24 (1.17, 1.31)	1.20	0.00	0.16	1.22 (1.16, 1.29)	1.19	0.00	0.16	1.27 (1.2, 1.34)	0.00
AIC		540,396				540,430				540,458	
Log likelihood		-270,188				-270,203				-270,222	

Percentage in dyads shows the percentage of dyadic data points for each of the theoretically important independent variables. For instance, among the 100149 dyadic data points where co-occurrence of plant use was present 34212 (34%) were the dyads that resided at the same camp, and 410 (0.4%) had mother-offspring relationship.

Table S2 continues

	Model 4		Model 5		Model 6		Model 7		Model 8	
	ODDS (CI)	**P**	**ODDS (CI)**	**P**	**ODDS (CI)**	**P**	**ODDS (CI)**	**P**	**ODDS (CI)**	**P**
Intercept	0.16 (0.16, 0.16)	0.00	0.17 (0.17, 0.18)	0.00	0.17 (0.17, 0.17)	0.00	0.17 (0.17, 0.18)	0.00	0.18 (0.17, 0.18)	0.00
Same camp					1.11 (1.09, 1.13)	0.00				
Same age group	1.36 (1.33, 1.39)	0.00								
Female-female										
Male-male										
r (0.25 increase)							1.22 (1.17, 1.27)	0.00		
Mother									1.52 (1.29, 1.8)	0.00
Father									1.2 (0.98, 1.47)	0.08
Sibling									1.52 (1.29, 1.81)	0.00
Spouse			1.88 (1.53, 2.3)	0.00						
Spouse's primary kin			1.5 (1.34, 1.68)	0.00						
Spouse's distant kin			1.24 (1.17, 1.31)	0.00						
AIC	540,686		541,396		541,430		541,452		541,484	
Log likelihood	-270,340		-270,693		-270,712		-270,723		-270,737	
For all models										
N (dyads)	23868									
N (total dyadic responses)	617465									
N (dyadic responses for shared plant use type for medicinal uses)	100149									
N (dyadic responses for not shared use types)	517316									

Table S3. Results from mixed effects logistic regression models on probabilities of reported co-occurrence of plant use related to foraging and social-life (combined). Related to Figure 2.

		Model 1				Model 2				Model 3	
	Percentage in dyads with the same plant use	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**	**ODDS (CI)**	**P**
Intercept		0 (0, 0)	1	0.00	0.004	0 (0, 0)	1	0.00	0.004	0 (0, 0)	0
Same camp	46%	1.84 (1.72, 1.97)	1.83	0.00	0.007	1.83 (1.71, 1.96)	1.82	0.00	0.007	1.8 (1.68, 1.92)	0
Same age group		1.51 (1.41, 1.62)	1.51	0.00	0.006	1.52 (1.41, 1.63)	1.51	0.00	0.006		
Female-female		0.91 (0.85, 0.99)	0.92	0.03	0.004	0.91 (0.84, 0.99)	0.91	0.02	0.004		
Male-male		1.13 (1.04, 1.22)	1.12	0.01	0.005	1.13 (1.04, 1.22)	1.13	0.00	0.005		
r (0.25 increase)		0.91 (0.78, 1.06)	0.91	0.24	0.004						
Mother	0.4%					1.36 (0.8, 2.31)	1.36	0.26	0.005		
Father	0.2%					0.6 (0.27, 1.31)	0.6	0.20	0.002		
Sibling	0.3%					0.86 (0.47, 1.57)	0.86	0.62	0.003		
Spouse	0.3%	0.82 (0.41, 1.66)	0.82	0.58	0.003	0.83 (0.41, 1.67)	0.83	0.60	0.003		
Spouse's primary kin	0.7%	0.85 (0.57, 1.27)	0.85	0.43	0.003	0.86 (0.58, 1.27)	0.86	0.44	0.003		
Spouse's distant kin	3%	0.78 (0.64, 0.96)	0.78	0.02	0.003	0.79 (0.64, 0.96)	0.79	0.02	0.003		
AIC		615,417				615,438				616,874	
Log likelihood		-307,609				-307,599				-308,407	

Table S3 continues

	Model 4		Model 5		Model 6		Model 7		Model 8	
	ODDS (CI)	**P**	**ODDS (CI)**	**P**	**ODDS (CI)**	**P**	**ODDS (CI)**	**P**	**ODDS (CI)**	**P**
Intercept	0 (0, 0.01)	0	0 (0, 0.01)	0	0.01 (0, 0.01)	0	0.01 (0, 0.01)	0	0.01 (0, 0.01)	0
Same camp										
Same age group	1.52 (1.42, 1.63)	0	1.52 (1.42, 1.64)	0						
Female-female										
Male-male										
r (0.25 increase)			1.19 (1.03, 1.38)	0.02	1.15 (0.99, 1.34)	0.07				
Mother							1.67 (0.96, 2.89)	0.07		
Father							0.82 (0.37, 1.83)	0.64		
Sibling							1.24 (0.67, 2.3)	0.49		
Spouse			1.21 (0.59, 2.49)	0.6					1.45 (0.7, 2.99)	0.32
Spouse's primary kin			1.19 (0.79, 1.78)	0.4					1.23 (0.82, 1.85)	0.31
Spouse's distant kin			1.05 (0.86, 1.29)	0.61					1.02 (0.83, 1.26)	0.82
AIC	618,414		618,435		619,704		619,738		619,756	
Log likelihood	-309,177		-309,147		-309,822		-309,819		-309,828	
For all models										
N (dyads)	23,868									
N (total dyadic responses)	523,061									
N (dyadic responses for shared plant use type for foraging and social beliefs)	5,745									
N (dyadic responses for not shared use types)	517,316									

Table S4. Results from mixed effects logistic regression models on probabilities of reported co-occurrence of plant use related to foraging (Models 1-2) and social-life (Models 3-4). Related to Figure 2.

		Model 1				Model 2			
	Percentage in dyads with the same plant use	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**
Intercept		0 (0, 0)	1	0	0.0001	0 (0, 0)	1	0	0.0001
Same camp	57%	2.94 (2.49, 3.49)	2.94	0	0.0003	2.91 (2.46, 3.44)	2.91	0	0.0003
Same age group		1.78 (1.5, 2.11)	1.78	0	0.0002	1.78 (1.5, 2.11)	1.78	0	0.0002
Female-female		0.88 (0.72, 1.07)	0.88	0.21	0.0001	0.88 (0.72, 1.07)	0.88	0.21	0.0001
Male-male		1.05 (0.85, 1.3)	1.05	0.64	0.0001	1.05 (0.85, 1.3)	1.05	0.65	0.0001
r (0.25 increase)		0.89 (0.62, 1.27)	0.89	0.51	0.0001				
Mother	0.4%					1.02 (0.26, 3.9)	1.02	0.98	0.0001
Father	0.3%					1.03 (0.23, 4.74)	1.03	0.96	0.0001
Sibling	0.4%					1.16 (0.33, 4.03)	1.16	0.81	0.0001
Spouse	0.4%	0.65 (0.12, 3.45)	0.65	0.61	0.0001	0.66 (0.12, 3.49)	0.66	0.62	0.0001
Spouse's primary kin	0.8%	0.76 (0.3, 1.95)	0.76	0.57	0.0001	0.77 (0.3, 1.97)	0.77	0.58	0.0001
Spouse's distant kin	3%	0.74 (0.46, 1.2)	0.74	0.22	0.0001	0.75 (0.47, 1.21)	0.75	0.24	0.0001
AIC		25464.3				25468.6			
Log likelihood		-12722.1				-12722.3			
N (dyads)		23,868				23,868			
N (total dyadic responses)		519,412				519,412			
N (dyadic responses for shared plant use type for foraging)		2,096				2,096			
N (dyadic responses for not shared use types)		517,316				517,316			

Table S4 continues

		Model 3				Model 4			
	Percentage in dyads with the same plant use	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**	**ODDS (CI)**	**Risk ratio**	**P**	**Probability**
Intercept		0 (0, 0)	1	0	0.003	0 (0, 0)	1	0	0.003
Same camp	39%	1.41 (1.29, 1.53)	1.4	0	0.004	1.4 (1.29, 1.51)	1.39	0	0.004
Same age group		1.38 (1.27, 1.5)	1.38	0	0.004	1.38 (1.27, 1.5)	1.38	0	0.004
Female-female		0.95 (0.86, 1.04)	0.95	0.25	0.003	0.95 (0.86, 1.04)	0.95	0.23	0.003
Male-male		1.15 (1.05, 1.27)	1.15	0	0.003	1.15 (1.05, 1.27)	1.15	0	0.003
r (0.25 increase)		0.95 (0.79, 1.15)	0.95	0.58	0.003				
Mother	0.4%					1.57 (0.84, 2.92)	1.56	0.16	0.004
Father	0.1%								
Sibling	0.2%					0.77 (0.35, 1.68)	0.77	0.51	0.002
Spouse	0.2%	0.87 (0.36, 2.11)	0.87	0.76	0.002	0.88 (0.36, 2.12)	0.88	0.77	0.002
Spouse's primary kin	0.7%	0.98 (0.61, 1.58)	0.98	0.95	0.003	0.99 (0.62, 1.58)	0.99	0.97	0.003
Spouse's distant kin	2%	0.78 (0.61, 1.01)	0.78	0.06	0.002	0.79 (0.61, 1.01)	0.79	0.06	0.002
AIC		42965				42965			
Log likelihood		-21472.5				-21471.5			
N (dyads)		23,868				23,868			
N (total dyadic responses)		520,965				520,965			
N (dyadic responses for shared plant use type for social beliefs)		3,649				3,649			
N (dyadic responses for not shared use types)		517,316				517,316			

Supplemental Experimental Procedures

S1. Measuring plant knowledge and use

S1.1. Plant list

At our first campsite, we asked individuals to list the names of the camp members who are known to have good knowledge of plants. The BaYaka have healers known as *ngangas*. Although families may specialize and are known to be experts in certain treatments, an individual can develop a high reputation and become *nganga* because of his/her skills in healing people. After choosing 15 adults (one of which was the *nganga* of the camp, five females) as informants we asked them to list the names of the medicinal plants they use. This initial list consisted of 83 vernacular names. We calculated how many times each of the 83 vernacular names was mentioned by informants. To avoid biasing our questionnaire sample with either plants that are used very frequently or seldom, we chose 33 plant species with mixed use-frequencies. For example, one plant on the list was mentioned by only one informant, whereas another was mentioned by 7 out of 15. After choosing 33 plants to use in our questionnaires, three informants (two from camp one, one from camp three), at different times, walked us around the forest and showed us the trees to take photos for identification and to ensure consensus for the vernacular names. 31 out of 33 plants were identified from the photographs at the Royal Botanic Gardens, Kew to investigate their cross-population and cross-species medicinal usage, and to conduct literature research on their bioactive properties (for the list of plant species and literature review see Table S1).

S1.2. Types of uses of plants by the Mbendjele BaYaka Pygmies

We asked 219 individuals whether they used each of the 33 plants species on our list. We then categorised the open answers with the help of the Biodiversity Information Standard for economic botany data [S34]. Although the majority of the uses were for medicinal purposes, we identified some other use categories. For instance, some plant parts were used as poisons to kill monkeys or fish. Some trees were known to have beehives or caterpillars so they were recognized as potential honey or caterpillar reserves. We categorised those answers as foraging related uses. Other uses concerned social norms and beliefs. For example, some plants were used to identify liars: if someone is accused of committing adultery or stealing from someone, the bark of a tree is boiled to make a drink. This drink is believed to be selectively poisonous: they poison liars and leave truthful people well. The BaYaka have social taboos concerning sex and menstrual bleeding [S35]. For example, a couple that have a breastfeeding baby is forbidden from having sexual intercourse until the baby is weaned. Otherwise, it is believed that the baby will become unwell and may die. Some plants are used when a couple break this norm based on the belief that they will prevent the baby from getting sick. Under the category of beliefs, there were other use types: some people mentioned their use of a particular plant because it brought luck in their search for a partner or they got better at singing. Other plant uses included making materials such as baskets or rugs, or plants that are consumed as food or are eaten by animals. Table 1 in the main text shows the full list of plant uses that are mentioned by 219 Mbendjele, and their use percentages calculated with respect to all data points (n= 7227).

S2. Study population and campsites

Mbendjele BaYaka hunter-gatherers are a subgroup of the BaYaka Pygmies who speak Mbendjele language and whose residence spans across the forests of the Republic of Congo and Central African Republic [S36]. BaYaka subsistence techniques include hunting, trapping, fishing, gathering forest products such as wild yams and caterpillars, honey collecting and agricultural work (for farmers). The BaYaka live in *lango'*s—multi-family camps consisting of a number of *fuma'*s (huts) in which nuclear families reside; camp size tends to vary from 10 to 60 individuals. They are predominantly exogamous (either father or mother coming from a different clan) and serially monogamous, although there are a few cases of polygyny [S37]. BaYaka are highly mobile; camp movement is influenced both by the availability of food resources, and the availability of the food products for exchange with villagers [S18]. Visits from other camps are common; for example, couples travel with their family to stay with in-laws for several weeks or months, or distant relatives come to stay with them [S38]. In addition, hundreds of people may come together during the dry-season ceremonies where isolated groups have a chance to meet each other [S39].

The fieldwork took place in the Likouola and Sangha regions of Congo's Ndoki forest between April and August 2014. We visited four camps, three of which were located in the forest and one of which was located in a logging town. The forest camps were established close to the mud roads opened by a logging company, but Pygmies at these camps frequently move to deeper parts of the forest depending on the availability of food resources or presence of a land-related conflict with non-Pygmy groups. Individuals may come back to the camps by the mud road where they can trade forest products with farmers for cultivated food, alcohol and cigarettes.

Two forest camps (Longa: n = 59, and Masia: n = 22) were located in a region called Minganga, one-hour walking distance from each other (~7 km), while the other forest camp (Ibamba: n = 31) was located much further away (~110 km), in the Ibamba region, south of Minganga. There is not constant migration between these two regions, but people may come together for a large ritual ceremony or an individual may migrate to marry. Since these regions are well isolated, different ritual ceremonies evolve in different regions [S39]. The last camp we visited was located in a logging town (Sembola, n=107). People in the town camp had more diverse backgrounds. While some individuals were born in the town (36%), others came from different forest regions. People living in the town camp were more market integrated and engaged in wage labour more frequently than people from the forest regions [S40].

Following Hill and Hurtado (1996), we assigned age groups to the participants by using the consensus age ranks and some anchor points where we had information on a participant actual age [S41]. We used these age ranks to break the data into four age categories: child (0-15 years, n= 22), young adult (15-25 years, n= 55), adult (25-45 years, n= 80) and old adult (45+ years, n= 62).

S3. Statistical analyses

The data contained 23,871 dyads and each dyad had responses for the uses of 33 plants (n= 787,743 data points). If an individual used a plant for multiple purposes we only used the first use type in our analyses. This only occurred in 2% of all the responses of 219 participants. The similarity in use type for each plant was coded based on the sub-categories presented in Table 1. For instance if individual A and individual B both used a given plant for treating digestive system disorders, their dyadic response was coded as 1 (knowledge shared). On the other hand, if the individuals in a dyad used a plant for different medicinal purposes their response was coded as 0 (knowledge not shared). If one individual used a plant, but the other did not use it for any reason their response was coded as 0. Similarly, if one individual used a plant for any use type under one category (e.g. foraging), and the other used the same plant for a use type under another category (e.g. medicinal) their response was coded as 0. 151,038 data points (19%) contained responses where none of the individuals in a dyad used a given plant. These were omitted from the analyses.

For medicinal uses, we compared the dyads that shared knowledge on the medicinal use of a plant with dyads that did not share knowledge on how to use a plant (Figures 2A and S1A, Table S2). For other use types, we compared dyads that shared knowledge on either the foraging related uses or the uses associated with social beliefs with dyads that did not share knowledge (Figures 2B and S1B, Table S3).

Our fixed predictor variables were: *Pairwise coefficient of relatedness*: continuous variable from 0 to 0.5. *Mother:* dyad has a mother-offspring kinship tie (1or 0). *Father:* dyad has a father-offspring kinship tie (1 or 0). *Sibling:* dyad has a sibling-sibling kinship tie (1 or 0). *Camp residence:* individuals in a dyad reside in the same camp (1 or 0). *Spousal tie:* dyad has a spousal tie (1 or 0). *Spouse's primary kin*: dyad has an affinal tie of being spouse's primary kin (1 or 0). *Spouse's distant kin*: dyad has an affinal tie of being spouse's distant kin (1 or 0). *Sex*: of the dyad (female-female, male-male, female-male). *Age group*: individuals in a dyad belonged to the same age group (1 or 0). None of the individuals in our sample knew their own age, thus we created a relative age list and used age ranks and a few anchor points (e.g. some people were born in the same year as the logging road was established in 1996) to group people into four categories: child, young adult, adult, old adult. If a dyad in our sample belonged to the same age group we coded it as 1, otherwise 0. Unless otherwise stated, we presented the results of models 1 and 2 (Tables S2-3) in the main text.

References

S1. Musuyu Muganza, D., Fruth, B. I., Nzunzu Lami, J., Mesia, G. K., Kambu, O. K., Tona, G. L., Cimanga Kanyanga, R., Cos, P., Maes, L., Apers, S., et al. (2012). In vitro antiprotozoal and cytotoxic activity of 33 ethonopharmacologically selected medicinal plants from Democratic Republic of Congo. J. Ethnopharmacol. *141*, 301–308.

S2. Memvanga, P. B., Tona, G. L., Mesia, G. K., Lusakibanza, M. M., and Cimanga, R. K. (2015). Antimalarial activity of medicinal plants from the democratic republic of Congo: A review. J. Ethnopharmacol. *169*, 76–98.

S3. Gillet, J.-F., and Doucet, J.-L. (2012). A commented checklist of woody plants in the Northern Republic of Congo. Plant Ecol. Evol. *145*, 258–271.

S4. AFlora Committee (2013). AFlora: The database of plant utilization in Africa. Cent. African Area Stud. Kyoto Univ. Available at: http://aflora.africa.kyoto-u.ac.jp/records/top.

S5. Kouam, S. F., Kusari, S., Lamshöft, M., Tatuedom, O. K., and Spiteller, M. (2012). Sapelenins G-J, acyclic triterpenoids with strong anti-inflammatory activities from the bark of the Cameroonian medicinal plant Entandrophragma cylindricum. Phytochemistry *83*, 79–86.

S6. Cousins, D., and Huffman, M. A. (2002). Medicinal Properties in the Diet of Gorillas : an Ethno-Pharmacological Evaluation. Afr. Study Monogr. *23*, 65–89.

S7. Masi, S., Gustafsson, E., Saint Jalme, M., Narat, V., Todd, A., Bomsel, M. C., and Krief, S. (2012). Unusual feeding behavior in wild great apes, a window to understand origins of self-medication in humans: Role of sociality and physiology on learning process. Physiol. Behav. *105*, 337–349.

S8. Bickii, J., Tchouya, G. R. F., Tchouankeu, J. C., and Tsamo, E. (2006). Antimalarial activity in crude extracts of some Cameroonian medicinal plants. Afr. J. Tradit. Complement. Altern. Med. *4*, 107–11.

S9. Pebsworth, P., Krief, S., and Huffman, M. A. (2006). The role of diet in self-medication among chimpanzees in the Sonso and Kanyawara Communities, Uganda. In Primates of Western Uganda, N. E. Newton-Fisher, H. Notman, J. D. Paterson, and V. Reynolds, eds. (New York: Springer), pp. 105–133.

S10. Ngamga, D., Fanso Free, S. N. Y., Tane, P., and Fomum, Z. T. (2007). Millaurine A, a new guanidine alkaloid from seeds of Millettia laurentii. Fitoterapia *78*, 276–7.

S11. Havyarimana, L., Ndendoung, S. T., Tamokou, J. D. D., Atchadé, A. D. T., and Tanyi, J. M. (2012). Chemical constituents of Millettia barteri and their antimicrobial and antioxidant activities. Pharm. Biol. *50*, 141–6.

S12. Betti, J. L. (2004). An ethnobotanical study of medicinal plants among the Baka pygmies in the Dja biosphere reserve, Cameroon. Afr. Study Monogr. *25*, 1–27.

S13. Olatokunboh, A. O., Kayode, Y. O., and Adeola, O. K. (2009). Anticonvulsant Activity of Rauvolfia vomitoria (Afzel). African J. Pharm. Pharmacol. *3*, 319–322.

S14. Zirihi, G. N., Mambu, L., Guédé-Guina, F., Bodo, B., and Grellier, P. (2005). In vitro antiplasmodial activity and cytotoxicity of 33 West African plants used for treatment of malaria. J. Ethnopharmacol. *98*, 281–285.

S15. Betti, J. L., Yongo, O. D., Mbomio, D. O., Iponga, D. M., and Ngoye, A. (2013). An Ethnobotanical and Floristical Study of Medicinal Plants Among the Baka Pygmies in the Periphery of the Ipassa- Biosphere Reserve , Gabon. European J. Med. Plants *3*, 174–205.

S16. Mesia, G. K., Tona, G. L., Nanga, T. H., Cimanga, R. K., Apers, S., Cos, P., Maes, L., Pieters, L., and Vlietinck, a. J. (2007). Antiprotozoal and cytotoxic screening of 45 plant extracts from Democratic Republic of Congo. J. Ethnopharmacol. *115*, 409–415.

S17. Kamanzi Atindehou, K., Schmid, C., Brun, R., Koné, M. W., and Traore, D. (2004). Antitrypanosomal and antiplasmodial activity of medicinal plants from Côte d'Ivoire. J. Ethnopharmacol. *90*, 221–227.

S18. Kitanishi, K. (1995). Seasonal changes in the subsistence activities and food intake of the Aka hunter-gatherers in northeastern Congo. Afr. Study Monogr. *16*, 73–118.

S19. Tekwu, E. M., Pieme, A. C., and Beng, V. P. (2012). Investigations of antimicrobial activity of some Cameroonian medicinal plant extracts against bacteria and yeast with gastrointestinal relevance. J. Ethnopharmacol. *142*, 265–273.

S20. Ibrahim, B., Sowemimo, A., Van Rooyen, A., and Van De Venter, M. (2012). Antiinflammatory, analgesic and antioxidant activities of Cyathula prostrata (Linn.) Blume (Amaranthaceae). J. Ethnopharmacol. *141*, 282–289.

S21. Brusotti, G., Tosi, S., Tava, A., Picco, A. M., Grisoli, P., Cesari, I., and Caccialanza, G. (2013). Antimicrobial and phytochemical properties of stem bark extracts from Piptadeniastrum africanum (Hook f.) Brenan. Ind. Crops Prod. *43*, 612–616.

S22. Ateufack, G., Domgnim Mokam, E. C., Mbiantcha, M., Dongmo Feudjio, R. B., David, N., and Kamanyi, A. (2015). Gastroprotective and ulcer healing effects of piptadeniastrum Africanum on experimentally induced gastric ulcers in rats. BMC Complement. Altern. Med. *15*, 214.

S23. Kumar, R., Sharma, R. J., Bairwa, K., Roy, R. K., and Kumar, A. (2010). Pharmacological review on natural antidiarrhoel agents. 66–93.

S24. Lamidi, M., DiGiorgio, C., Delmas, F., Favel, a, Eyele Mve-Mba, C., Rondi, M. L., Ollivier, E., Nze-Ekekang, L., and Balansard, G. (2005). In vitro cytotoxic, antileishmanial and antifungal activities of ethnopharmacologically selected Gabonese plants. J. Ethnopharmacol. *102*, 185–90.

S25. Lamidi, M., Ollivier, E., Gasquet, M., Faure, R., Nzé-Ekekang, L., and Balansard, G. (1996). Structural and Antimalarial Studies of Saponins from Nauclea diderrichii Bark. In Saponins Used in Traditional and Modern Medicine SE - 31 Advances in Experimental Medicine and Biology., G. Waller and K. Yamasaki, eds. (Springer US), pp. 383–399.

S26. Krief, S., Hladik, C. M., and Haxaire, C. (2005). Ethnomedicinal and bioactive properties of plants ingested by wild chimpanzees in Uganda. J. Ethnopharmacol. *101*, 1–15.

S27. Onguéné, P. A., Ntie-Kang, F., Lifongo, L. L., Ndom, J. C., Sippl, W., and Mbaze, L. M. (2014). The potential of anti-malarial compounds derived from African medicinal plants, part II: a pharmacological evaluation of non-alkaloids and non-terpenoids. Malar. J. *13*, 81.

S28. Mbaze, L. M. a, Poumale, H. M. P., Wansi, J. D., Lado, J. A., Khan, S. N., Iqbal, M. C., Ngadjui, B. T., and Laatsch, H. (2007). a-Glucosidase inhibitory pentacyclic triterpenes from the stem bark of Fagara tessmannii (Rutaceae). Phytochemistry *68*, 591–595.

S29. Okany, C. C., Ishola, I. O., and Ashorobi, R. B. (2012). Evaluation of analgesic and antistress potential of methanolic stem wood extract of Microdesmis puberula Hook.f. Ex Planch (Pandaceae) in mice. Int. J. Appl. Res. Nat. Prod. *5*, 30–36.

S30. Huffman, M. A. (1997). Current evidence for self-medication in primates: A multidisciplinary perspective. Am. J. Phys. Anthropol. *104*, 171–200.

S31. Abiodun, O., Gbotosho, G., Ajaiyeoba, E., Happi, T., Falade, M., Wittlin, S., Sowunmi, A., Brun, R., and Oduola, A. (2011). In vitro antiplasmodial activity and toxicity assessment of some plants from Nigerian ethnomedicine. Pharm. Biol. *49*, 9–14.

S32. Dimo, T., Ngueguim, F. T., Kamtchouing, P., Dongo, E., and Tan, P. V (2006). Glucose lowering efficacy of the aqueous stem bark extract of Trema orientalis (Linn) Blume in normal and streptozotocin diabetic rats. Pharmazie *61*, 233–6.

S33. Hohmann, G., Robbins, M., and Boesch, C. (2006). Feeding ecology in apes and other primates Cambridge .

S34. Cook, F. E. M. (1995). Economic Botany Data Collection Standard. Prepared for the International Working Group on Taxonomic Databases for Plant Sciences (TDWG). (Kew: Royal Botanic Gardens, Kew).

S35. Lewis, J. (2008). Ekila: blood, bodies, and egalitarian societies. J. R. Anthropol. Inst., 297–315.

S36. Lewis, J. (2014). Egalitarian social organization: the case of the Mbendjele BaYaka. In Hunter-Gatherers of the Congo Basin, B. S. Hewlett, ed. (New Brunswick (U.S.A) and London (U.K): Transaction Publishers), pp. 219–243.

S37. Chaudhary, N., Salali, G. D., Thompson, J., Dyble, M., Page, A., Smith, D., Mace, R., and

Migliano, A. B. (2015). Polygyny without wealth: popularity in gift games predicts polygyny in BaYaka Pygmies. R. Soc. Open Sci. *2*, 150054.

S38. Bahuchet, S. (1999). Aka pygmies. In The Cambridge Encyclopedia of Hunter and Gatherers, R. B. Lee and R. Daly, eds. (Cambridge Univ Press, Cambridge, UK), pp. 190–194.

S39. Lewis, J. (2002). PhD Thesis. Forest hunter-gatherers and their world: A Study of the Mbendjele Yaka Pygmies of Congo-Brazzaville and Their Secular and Religious Activities and Representations.

S40. Salali, G. D., and Migliano, A. B. (2015). Future Discounting in Congo Basin Hunter-Gatherers Declines with Socio-Economic Transitions. PLoS One *10*, e0137806.

S41. Hill, K., and Hurtado, A. M. (1996). Ache Life History: The Ecology and Demography of a Foraging People. (Aldine Press).