The pediatrician’s normalizing practice in well-child visits : translating statistic measures into lay terms as a means to reassure parents

Chapter 9

The pediatrician's normalizing practice in well-child visits: Translating statistic measures into lay terms as a means to reassure parents

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Abstract

Drawing on a corpus of 23 video-recorded well-child visits and adopting a conversation analysis approach, this chapter illustrates how pediatricians accomplish a no-problem assessment of infants' physical growth by implementing a "normalizing practice". It consists of pediatricians formulating the numerical values for length, weight, and head circumference in terms of statistical normality which is "talked into being" by referring to the relevant growth percentile, and the subsequent translation of the statistically-formatted assessment into lay language. The analysis highlights the pragmatic and epistemic work of the normalizing practice: reassuring parents and ratifying medical knowledge as the most authoritative voice. I argue that pediatricians and parents construct a shared understanding of unproblematic infant growth by cooperatively constituting statistics as the ultimate trustworthy representation of "normality".

Keywords: pediatrician-parent interaction, knowledge translation, interactional construction of normality, growth assessment sequences, no-problem trajectory, conversation analysis

1. Introduction

One of the most common sources of anxiety among parents is the growth of their children, especially during the first years of life (Lucas et al. 2007; Mulcahy and Savage 2016; Restall and Borton 2010). For this reason, well-child visits can constitute a stressful event for parents, given the growth assessment potentially "atypical" outcome. However, despite constituting a pivotal moment for the global monitoring of children's health and development, very little is known about the interactional accomplishment of well-child visits (but see Krippeit et al. 2014; Zanini and González-Martínez 2015) and particularly on how pediatricians and parents manage the evaluation of infants' physical growth which constitutes one of the main institutional goals of these visits.

Related to the core task of these visits is their epistemic landscape (Heritage and Raymond 2012): while parents have first-hand

knowledge of the empirical growth of their child, they do not necessarily master the expert knowledge necessary to evaluate if this growth falls into the normal range or not. Not surprisingly, delivering and receiving assessments are recurrent discursive activities in this kind of visit.

As literature on the interactional organization of assessments in institutional settings has extensively highlighted, assessment sequences are one of the major communicative environments where the management and the negotiation of epistemic rights and authority, as well as institutional and local relevant identities, take place (Goodwin and Goodwin 1987; Heritage and Raymond 2005; Lindström and Mondada 2009; Raymond and Heritage 2006). Following this line of inquiry and adopting a conversation analysis informed approach to a data set of 23 video-recorded well-child visits, this chapter illustrates how the pediatricians accomplish a no-problem assessment of infants' physical growth during the diagnostic-like phase of the visit by implementing what I call the "normalizing practice". It consists of the pediatrician's a) formulating the numerical values of the infant's length, weight, and head circumference in terms of statistical normality which is "talked into being" (Heritage 1984: 290) by referring to the relevant growth percentile and b) in the subsequent translation of the statistically formatted assessment in lay language.

The chapter is structured as follows. Section 2 provides an overview of the communicative challenges faced by healthcare professionals when delivering diagnostic news involving "normality talk" (Bredmar and Linell 1999: 257) and a review of literature focusing on normality as a local achievement in medical interactions. Section 3 presents an outline of the specific characteristics of well-child visits and a general description of how the assessment of infants' growth unfolds in these visits. In section 4, a description of the data and methods of this study is offered. Then, in sections 5 and 6, the analysis illustrates when and how the pediatricians implement the normalizing practice and how parents receive it. In section 7, I discuss the results and argue that through this practice, the pediatricians engage in a pragmatic as well as epistemic work: they reassure parents, ratifying, at the same time, the "voice of medicine" (Mishler 1984) as the expert, authoritative one.

Finally, in section 8, I suggest that in growth assessment sequences, pediatricians and parents engage in constructing a shared understanding of what an unproblematic infant growth is by cooperatively constituting statistics as the ultimate trustworthy representation of "normality".

2. Healthcare professionals' communicative challenges in "normality" news delivery

The concept of "normality" in medicine has long been debated by social scientists and philosophers of science who have elaborated different, and sometimes even conflicting, definitions of what it means to be normal. In a nutshell, normality has been conceptualized by adopting either a biomedical- based naturalistic or a culture-based normative perspective (for a critical review, see Catita et al. 2020). The former approach, which aims to be purely descriptive, conceives normality as a lack of pathological conditions (i.e., normality corresponds to health), as the typical and frequent condition (i.e., the statistically standard, not deviant case), or as the ideal health status defined by optimal functional abilities (see among others Boorse 1975, 1977; Scadding 1990). On the other hand, according to the culture-based normative approach, the conception of normality is inherently value-laden and reflects socially shared norms and beliefs (see, among others, Canguilhem [1943]1991; Foucault [1973]1994; Goosens 1980). Differences in the conception of normality are at stake also in doctor-patient interactions. Indeed, given the epistemic asymmetries at play (Heritage and Maynard 2006; Heritage 2013; Lindström and Karlsson 2016), different understandings of health

and disease can emerge ("the voice of medicine" vs "the voice of lifeworld", Mishler 1984; "the doctor's side" vs "the patient's side", Raymond 2014) and participants may attribute to "normality" different -and at times contrasting- meanings. This is particularly evident during the diagnostic phase of the visit, where the physician's epistemic authority reaches its peak (Heath 1992; Heritage and Maynard 2006; Maynard 2003; Stivers 2007). Indeed, one of the most crucial challenges faced by healthcare practitioners consists in how to deliver diagnostic news and translate their meaning from the often-opaque expert vocabulary into lay one in order to make patients gain an adequate understanding of their condition (Abbott 1988; Byrne and Long 1976; Freidson 1970; Linell 1998; Maynard 2006; Oborn et al. 2010; Straus et al. 2013). In particular, when it comes to statistically based knowledge (e.g., children's growth percentiles), its specialized and technical format may be unclear and out of the patient's (or parents') reach: as Rapp (1988) pointed out, "'statistics' implies an abstract mathematical universe that may not be shared by clients" (p. 148) and, therefore, can be difficult to understand by laypersons. For this reason, potential misunderstandings or obstacles in doctor-patient communication might ensue as patients (or parents) can draw unjustified

inferences from quantification and statistical data[1]. This, in turn, can jeopardize patients' active participation in the consultation and the construction of the therapeutic alliance.

Given the importance of constructing and preserving a mutual understanding during the diagnostic process, many scholars have investigated how healthcare professionals and patients engage in, respectively, the delivery and reception of "normality" (and "abnormality") news. The next section reviews some of these studies.

2.1 The interactional construction of "normality" in healthcare evaluations

Research focusing on the framing of normality in healthcare settings has extensively shown how its meaning is constantly created and recreated by participants in the interaction. Analyzing test results and risk communication, Adelswärd and Sachs (1996, 1998) showed how nurses recontextualize epidemiological findings -expressed in numerical values- in everyday terms for patients to make them understand their specific health situation. In

[1] [3] As an anonymous reviewer rightly highlights, laypersons' misunderstanding of statistical data is often steered by their emotional response to it. This is particularly relevant for the specific context under scrutiny (i.e., well-child visits), where parents often display concerns regarding the appropriateness of their children's growth and development (see section 5, ex. 2 and ex. 3).

their study on interactions between midwives and expectant mothers, Bredmar and Linell (1999) found that references to normality were positively connotated and frequently used by the two parties in both its “statistical/scientific” and “moral/ideal” sense. In addition, and from a pragmatic viewpoint, reconfirmation of normality by midwives worked as a resource for reassuring and providing solidarity to expectant mothers. In the context of genetic risk communication in counseling, Sarangi (2001a) analyzed how expert and lay formulations of normality are “locally produced and (re)defined as a way of dealing with uncertainties” (p. 110) by genetic counselors and parents. In their study on oncology interviews, Gutzmer and Beach (2015) analyzed how physicians routinely employ the term “normal” when assessing the patient’s health status to accomplish different social actions that are crucial for cancer care. In particular, the authors drew their attention to how oncologists identify wellness and/or sickness by labeling patients, symptoms, or test results as normal and/or non-normal.

Adding to this line of inquiry, this chapter investigates how the recruitment of (statistical) normality and its translation into everyday language are deployed by the pediatricians to provide reassurance to parents during well- child visits and ratify medical knowledge as the most authoritative voice.

The next section presents an overview of the specific features of well-child visits and a general description of how the growth assessment unfolds in these visits.

3. Well-child visits and the assessment of infants' physical growth

Studies on interaction in pediatric settings mainly focused on acute care encounters (see Stivers 2002, 2005, 2006, 2007), allergic outpatient clinics (Aronsson and Rundström 1989; Jenkins et al. 2020), pediatric oncology units (Aronsson and Rindstedt 2011; Rindstedt and Aronsson 2012; Rinstedt 2014), pediatric palliative care (Ekberg S. et al. 2015, 2020; Ekberg K. 2020), vaccination health supervision visits (Opel et al., 2013, 2015), and pediatric pain clinics (Clemente, 2009; Clemente et al., 2008, 2012). However, despite constituting a pivotal moment for the global assessment of children's health and development, very little is known about the interactional accomplishments of well-child visits (but see Heritage and Sefi, 1992; Heritage and Lindström 1998; Krippeit et al. 2014; Zanini and González-Martínez 2015). Well-child visits are regular check-ups where the healthcare provider (usually the pediatrician or the nurse) examines and

tracks the child's physical growth and his/her cognitive, emotional, and social development according to the expected standards.

Some differences occur with respect to acute care visits. In terms of the overall structural organization, the reasons for the visit and the "doctorability" are not at stake, nor usually the diagnosis of disease and the prescription of medical treatments. The topics of conversation rather concern the typicality of the child's growth and development and the appropriateness of the caregiving practices allegedly responsible for the child's well-being (e.g., feeding practices, sleeping postures, pacifier use, see Caronia and Ranzani, 2023). Therefore, well-child visits are social *lieux* where participants concurrently presuppose and maintain shared normative models of children's healthy growth and development as well as suitable ways of parenting (for analogous considerations, see Caronia and Ranzani 2021, 2023; Heritage and Sefi 1992; Heritage and Lindström 1998, 2012).

The assessment of infants' physical growth is, therefore, an institutionally relevant activity and in this corpus typically encompasses different actions across different phases of the visit. First, during the physical examination, the pediatrician measures the infant's length, weight, and head circumference and immediately reports to parents the respective numerical values

through a "report formatted online commentary" (Heritage and Stivers 1999; on the inherently evaluative nature of reports see Galatolo and Cirillo 2017: 342).

Then, in the following step, the pediatrician enters the current numerical values into the patient's electronic health record and compares them with the measures registered during the last visit and the established age- and sex- specific growth standards. Finally, grounded on these comparisons, the pediatrician provides parents with a general evaluation of the infants' growth[2]. Despite not constituting a diagnosis in the traditional sense since no illness-related symptoms are at stake, the assessment of the infant's growth is considered here to be part of what I call the diagnostic-like phase of the visit. First, because of its position within the visit: with respect to the overall structural organization, it immediately follows the physical examination, like diagnosing (see, among others, Heritage and Maynard 2006; Robinson 1998, 2001). Second, because of its task-focused activities, i.e., delivering and receiving evaluations are typical of the diagnostic

[2]The process of evaluation of babies' growth described in the main text (see section 3) is the specific one carried out by the pediatricians in this corpus. When it comes to assessing babies' physical growth, no other diagnostic-relevant factors such as palpation, skin and skeletal structure, or cognitive responses are involved. However, at least to my knowledge, most healthcare providers (at least in western countries) follow a similar evaluation process based on measuring the length, head circumference, and weight (respectively, with the meterstick and the scale) and then comparing the results with statistical standards (see the WHO guidelines on measuring a child's growth and interpreting growth indicators). As an anonymous reviewer rightly points out, this specific diagnostic process is itself a culturally shared benchmark and a locally established common ground.

phase.

3.1 Infants' growth curves and their (mis)interpretations

The clinical tool of reference mostly used worldwide by professionals to track and assess the physical growth of children is growth charts. They consist of a series of percentile curves illustrating the distribution of selected body measurements (i.e., weight, length, and head circumference) in children over time. Given the statistical nature of percentile curves, parents' correct understanding of this tool cannot be taken for granted (see section 2 above). As a matter of fact, several studies using self-report techniques demonstrated that parents' misunderstandings about their children's growth values are far from being rare since a proper comprehension of growth curves requires at least some health literacy and numeracy-related skills (see Ben-Josef et al. 2007, 2009; Hager et al. 2012; Roberfroid et al. 2007; Sachs et al. 2011). Nevertheless, despite the relevance of such an issue, at least to my knowledge, little if any study has investigated the actual unfolding of infants' growth assessment during well-child visits and parents' and pediatricians' management of this delicate yet crucial activity.

The next section provides a brief overview of the data and the

methodology adopted in this study.

4. Data, methodology, and analytical procedures

This chapter reports preliminary findings from a larger study on pediatrician- parent interaction. The research was conducted in a north-centre region of Italy and involved two pediatricians and twenty-two families with children aged between 0 and 18 months (with only one case of a 5-year-old boy). The corpus consists of 23 pediatric well-child visits audio and video- recorded in two pediatric primary care clinics. The author was present during the visits as the responsible for managing the video camera. Participants' written consent was obtained according to Italian law n. 196/2003 and EU Regulation n. 2016/679 (GDPR 2016/679), which regulates the handling of personal and sensitive data. Data were transcribed and analyzed using a Conversation Analysis informed approach (Jefferson 2004; Sacks et al. 1974; Sidnell and Stivers 2013), which has proven to be well-suited for studying medical interactions as a local collaborative achievement. Transcripts are presented in two lines: original Italian and an almost literal English translation. For the sake of anonymity, all names have been fictionalized.

5. The pediatrician's normalizing practice: What it is and when it occurs

The chapter analyzes a practice implemented by the pediatricians in this data set to accomplish a no-problem assessment of the infant's physical growth during the diagnostic-like phase of the visit, i.e., the "normalizing practice". It consists of the pediatrician's formulation of the numerical values for length, weight, and head circumference in terms of statistical normality which is "talked into being" (Heritage 1984: 290) by referring to the relevant growth percentile, and in the subsequent translation of the statistically formatted assessment into lay language. A total of 10 instances of this normalizing practice have been identified in the corpus[3].

The next example illustrates what the "normalizing practice" is and how it is designed. After the pediatrician has entered the infant's length, weight, and head circumference measures in the electronic health record, she delivers to the mother a no-problem

[3] In the remaining 13 visits, the pediatricians: a) compare the current growth values with the last ones without referring to percentile curves (e.g., he was 75 [cm] and a half so he gained more weight than length), at times adding a positive evaluation in lay terms (e.g., "she gained 400 grams it's very good at this stage"), b) refer to the relevant percentile without translating it into lay terms (e.g., "he is always at the fiftieth, forty-fifth percentile), or c) provide positive evaluations of the growth in lay terms (e.g., "the growth it's always excellent).

assessment of the baby's growth.

Ex. 1 - VA_10 (7.42 – 7.53)

M: mother P: pediatrician

The physical examination is just concluded, and M has previously expressed some form of concern. M is dressing the baby on the couch while P is sitting at the desk, looking at the computer.

1 P come curva (.) siamo sempre sul cinquantesimo di peso=
as for the curve (.) we're always at the fiftieth for weight=

2 M =bene.
=good.

3 P e sul settantacinquesimo d'altezza
and at the seventy-fifth for height

4 P quindi assolutamente regolare eh,
so absolutely regular eh,

5 M ok benissimo.
ok very good.

In lines 1 and 3, P locates the baby's weight and length into the percentile of reference (note the use of the inclusive pronoun "we" in the delivery of the assessment, line 1). Despite M has already replied with a good news receipt ("good", line 2, see Maynard and Frankel 2006) displaying her understanding of the statistical

register, P translates the statistically formatted assessment into lay, everyday language (“so absolutely regular”, line 4; note the use of “extreme case formulation”, Pomerantz, 1986). In this way, she i) uses expert knowledge to support the evidence for her no-problem trajectory, ii) makes the content of the assessment more accessible and comprehensible by the mother, and iii) locally constructs the baby’s growth as statistically “normal”, which is treated as a reassuring argument by both parties. Indeed, M aligns with P through an upgraded positive assessment (from “good” in line 2, to “ok very good” in line 5).

As to the sequential position, the pediatrician’s normalizing practice occurs during the diagnostic-like phase of the visit *after* parents have displayed a certain degree of concern and apprehension regarding their infant’s growth values. This display of concern usually takes place during the physical examination, more specifically immediately after the pediatrician’s online communication of the numerical values for length, weight, and head circumference.

The following two excerpts show some examples of parental expression of concern.

Ex. 2 - VA_10 (6.22 – 6.35)

M: mother P: pediatrician

The next excerpt immediately precedes Example 1. We join the conversation during the physical examination when P is reporting the infant's length just measured. M and P are standing near the couch where the baby is lying.

1	P	sessantaquattro. *sixty-four. ((looking at M))*
2	M	mh ok.
3	P	cresciuta? *has she grown?*
4	**M**	**sì non tantissimo (.) due centimetri.** ***yes not very much (.) two centimeters.***
5	P	beh (.) va be[ne, *well (.) it's [ok,*
6	M	[ah ok. *[oh ok.*
7		(1.5) *((P and M are laughing))*
8	P	due centimetri sono tanto, *two centimeters are a lot,*
9	**M**	**mi aspettavo di più.** ***I was expecting more.***

At the beginning of the excerpt, P communicates the infant's length value to M through a numerical report formatted online

comment (“sixty-four”, line 1). After M’s acknowledgment token (“mh ok”, line 2), P asks M whether the baby has grown, thus acknowledging M’s epistemic right to know if her daughter has grown (“has she grown?”, line 3). In response, M first provides a confirmation (“yes”, line 4), but immediately after, she adds a negative assessment of the infant’s length measure (“not very much”, line 4) and then specifies the numerical value (“two centimeters”, line 4). In doing so, she steps into the pediatrician’s epistemic domain, engages in a related epistemic activity (assessing), and projects a problematic trajectory. Note that P’s question in line 3 projected M’s right to know if the baby was grown, not her right to assess the growth, which she does in line 4. Then, despite P’s engagement in a no-problem trajectory (see lines 5 and 8), M explicitly displays her dissatisfaction concerning the daughter’s length (“I was expecting more”, line 9). In this way, and despite P’s positive assessment of the numerical value just provided (“two centimeters are a lot”, line 8), M reaffirms her problematic stance and orients P to take into account her concern. As we have seen in Example 1, the pediatrician’s following reaction consists in the implementation of the normalizing practice to accomplish a no-problem assessment.

What follows is another example of how a mother displays her worry about the baby’s height during the physical examination.

Ex. 3 - VA_09 (6.14 – 6.21)

M: mother P: pediatrician

The excerpt starts when P is communicating the infant's head circumference that was just measured. M and P are standing near the couch, where the baby is lying.

1 P quarantotto.
forty-eight.

2 M oh: *((addressing the baby who started crying immediately before))*

3 M quarantotto, settantanove,
forty-eight, seventy-nine,

4 M secondo me non sei cresciuta un accidente di altezza.
in my opinion you haven't grown at all for height.

After P has communicated the infant's head measure ("forty-eight", line 1), M repeats both the number just stated by P ("forty-eight", line 3) and the numerical value for height ("seventy-nine", line 3) reported by P immediately before in the conversation (not transcribed). Then, M explicitly displays her concern regarding her daughter's height and, concurrently, claims her right to assess the infant's growth, yet in a mitigated fashion (see the use of the epistemic marker "in my opinion" in turn initial position and the momentary construction of her newborn daughter as the recipient

of the talk, line 4). In this way, M channels P's attention toward (what is treated as) a problematic increase in height.

The next section illustrates how, during the diagnostic phase of the visit, the pediatricians in the corpus assess infants' growth and address the formerly expressed parental concern by implementing the normalizing practice.

6. Assessing the infant's growth: The local constitution of statistical normality

The examples in this section focus on the assessment of infants' growth occurring during the diagnostic-like phase of the visit and illustrate how the pediatricians and the parents engage in constituting a local and shared definition of normality as a statistically ratified status. Both parties treat this statistical normality as the desirable and suitable outcome of the growth assessment.

Ex. 4 - VA_10 (16.23 – 16.40)

M: mother P: pediatrician

1 M io la ve- perché io la vedo già un po' ciccia=
I se- her because I see her already a bit fat=

2 M =ma non è ci-?=
=but isn't she fa-=?

3 P =no è bella tondina[4]
=no she is a bit chubby

4 P però è sul ^[cinquantesimo percentile]
but she is at the ^[fiftieth percentile]
^((looking at the growth chart on the desk))

5 M [non troppo? (.) ah ok.]
[not too much? (.) ah ok.]

6 P assolutamente no ^è sul cinquantesimo di peso=
absolutely not she ^is at the fiftieth for weight=
^((pointing at the growth chart))

7 M =ah.

8 P e sul settantacinquesimo di altezza,
and at the seventy-fifth for length, ((looking back at the computer))

9 P quindi è proprio: re[gola]re insomma.
therefore she is really: re[gula]r. ((looking at M))

10 M [(bene)].
[(good)]. ((nodding and looking at the baby))

The excerpt starts when M is asking P whether her daughter's weight is excessive. Despite a general evaluation of the infant's

[4] In Italian the adjective "tondo", which literally means "round" or "rounded", can be used to gently refer to an overweight person. "Tondina" is the feminine diminutive of "tondo".

growth has already been provided by P (see ex. 1), M further problematizes her daughter's growth (see ex. 2), but this time with regards to the weight. P is sitting at the desk writing diagnostic information in the electronic health records, while M is sitting in front of them holding the baby.

In line 1, M reports to P that she *sees* her daughter as a bit overweight. In designing the declarative, M uses an "evidential formulation" (Chafe and Nichols 1986) based upon visual evidence that upgrades the validity of her claim. Then, M prefaces her turn with an adversative and asks P to confirm that her daughter is not overweight with a negative polar question ("but isn't she fa-?", line 2). After interrupting M's turn with a quick insertion (see the latching, lines 2 and 3), P disconfirms M's claim and assesses the infant's physical appearance just brought to her attention by M with a diminutive ("no she is a bit chubby", "bella tondina", in Italian) which mitigates M's claim. Immediately after, P expands her assessment and relocates the baby's growth into the percentile of reference ("but she is at the fiftieth percentile", line 4). Note that with the "but" preface, P sets her utterance in opposition to the already mitigated assessment ("no she is a bit chubby", line 3) and frames the upcoming evaluation as non-problematic. However, even before P reaches a possible completion point, M enters early and asks P for further

confirmation (“not too much?”, line 5, which refers to P’s previous assessment “she is a bit chubby”, line 3). At this point, despite M’s acknowledgment token in line 5, P answers M’s question by markedly confirming that the baby is not “too” chubby (“absolutely not she is at the fiftieth for weight”, line 6). Indeed, by resorting to an extreme case formulation and to the statistical reference, with “absolutely” (line 6) P strongly legitimates her assessment. Note that P multimodally orients to the growth chart on the desk by pointing at the percentile she is verbally referring to (line 6), thus using documental evidence to further account for her assessment. In doing so, P mobilizes once again the voice of statistics and formulates the baby’s weight and length in terms of the percentile they belong to (see lines 6 and 8). In this way, she uses her expert knowledge to support the evidence of her no-problem trajectory. Then, P translates the statistically formatted normality into everyday language (“therefore she is really regular”, line 9). Thus, P locally crafts the infant’s growth as “regular” and, by implication, statistically “normal”. Note that P recruits again an extreme case formulation (“really” regular; “proprio”, in Italian, line 9) that further legitimates her claim. The excerpt ends with M’s good news receipt (“good”, line 10) and nodding, that signal her alignment with P’s formulation.

To sum up, through the implementation of the normalizing

practice, P reassures M by labeling her daughter's growth as "really regular"; moreover, by considering the infant's alignment to the statistical norm as a reassuring argument, P contributes to confirming statistics as the ultimate and reliable definition of "normality".

The following example further illustrates how the pediatrician normalizes the infant's growth.

Ex. 5 - PI_04 (10.40 – 11.09)

M: mother P: pediatrician

We join the conversation immediately after P has entered the infant's numerical values for height, weight, and head circumference into the electronic health record. P is sitting at the desk looking at the computer. M, who is out of the range of the video camera, is standing near the coach where the baby is sitting.

1	P	dunque lui cresce tutto:::= *so he grows a:::ll=*
2	M	=in [larghezza hh] *=in [width hh]*
3	P	[perfettame]nte nel- *[perfect]ly at the-*
4	P	nel cinquantesimo percentile *at the fiftieth percentile*

5 P quindi [in] perfetta media,
so [pe]rfectly on average,

6 M [ok].

7 P né di più né di meno
no more no less

8 M bene.
good.

9 P il peso è adeguato all'altezza=
the weight is appropriate to the height=

10 M =meno [male].
=thank [goodness].

11 P [non è-] non è
[it is not-] it is not ((looking at M))

12 P eccedente [quin]di va bene,
exceeding [so] it's ok, ((looking at M))

13 M [ok].

14 M puoi continuare a mangiare i [tortellini]
you can continue to eat [tortellini]

15 P [nonostante-]
[despite-]

16 P puoi ^continuare a mangiare i tortellini tranquillamente
you can ^continue to eat tortellini serenely ((looking at M))

17 M ^*((laughing))*

18 P tutto in ci- tutto proprio in me[dia sul-]
all at the fi- exactly all on a[verage-]

19 M [perfetto].
[perfect].

20 P proprio sulla linea del cinquantesimo proprio,
exactly on the line of the fiftieth,

21 P quindi: (.) spaccato (.) preciso.
so: (.) exact (.) precise.

In the turn at line 1, P initiates the assessment of the baby's growth values just entered in the electronic health record. In line 2, M quickly completes P's turn (see the latching in lines 1 and 2) by ironically suggesting that her son has only put on weight, thus restating her concern about the baby being overweight expressed early in the conversation (not transcribed). Entering early M's turn, P continues his evaluation by locating the baby's growth values into the reference percentile curve ("perfectly at the at the fiftieth percentile", lines 3 and 4). Note the use of the extreme case formulation ("perfectly", line 3) that frames the upcoming assessment as non- problematic. At this point, in line 5, P translates the information just delivered into a less specialistic but still statistically informed register ("so perfectly on average", line 5) and recycles the intensifier "perfectly". By locating the infant's

growth within the standard range, P grounds the basis for a subsequent positive assessment. Indeed, in line 7, P expands his assessment by positioning the growth again into a standard level, which is indexed as neither above nor below the mean values ("no more no less"; on the sense-making of "under" and "over" a limit in risk communication see Adelswärd and Sachs 1996). After M's good news receipt ("good", line 8), P further explains that the infant's weight is appropriate to his height, thus evoking the statistical norm establishing proportions between lengths and weights in lay terms ("the weight is appropriate to the height", line 9). Then, M proffers an upgraded good news receipt ("thank goodness", line 10), in which P enters early to further expand his no-problem trajectory. Note that this time, while looking at M, P translates the assessment into lay -and therefore more accessible- register ("it's not exceeding so it's ok", lines 11 and 12), to which the mother agrees in overlapping ("ok", line 13).

Immediately after that, M and P joke about the baby's diet (lines 14-17). In this way, M displays her understanding of and alignment with P's no- problem trajectory.

Note that despite a common ground seems to have been established, P carries on his evaluation. After mobilizing once again growth percentiles and using extreme case formulations ("exactly all on average", line 18, "all on the line of the fiftieth",

line 20), at the end of the sequence P further translates his statistically formatted assessment into lay terms and locally constructs the baby's growth as typical ("so exact, precise", line 21).

As in the previous example, P normalizing practice serves both to reassure M and to re-establish biomedical knowledge as the reliable representation of "exact", "precise", and by implication, reliable and legitimate bases to assess "normal" growth.

Ex. 6 - PI_05 (18.39 – 19.00)

M: mother P: pediatrician G: grandmother

We join the conversation during the diagnostic-like phase of the visit immediately after P has reported the numerical values for the infant's height, weight, and head circumference on the electronic health record. P is sitting at the desk and is out of the range of the video camera; G is sitting in front of him while M is dressing the baby on the couch.

1	P	eh lui sì è- è- è tutto nelle medie, *well yes everything is- is- is on average,*
2	P	^anche l'altezza:::: *^also the hei::::ght*
3	G	^*((nodding and looking at P))*
4	P	è tutto al cinquantesimo anche lui,=

everything is at the fiftieth for him too,=

5 M =perfetto.=
=perfect.=

6 P =quindi non ha perso niente [come:] peso,
=so he hasn't lost anything [i:n] weight,

7 M [bene].
[good].

8 P come crescita è: (.) una crescita nella media.
as for the growth i:s (.) a growth on average.

9 M benis[simo.
very [good.

10 G [bene bene.
[good good.

At the beginning of the excerpt, P delivers a no-problem assessment of the infant's growth first by assessing the numerical values just acquired through the physical examination as being "on average" ("well yes everything is on average", line 1), and second, by locating them into the percentile curves they belong to ("everything is at the fiftieth for him too", line 4). Despite M's marked good news receipt ("perfect", line 5) indicates her understanding of both the semi-expert term ("on average", line 1) and the specialized and even elliptical expression term ("at the fiftieth", line 4), P translates his prior statistically formatted

assessment into lay terms (“so he hasn’t lost anything in weight”, line 6). Then, and after M’s further display of understanding and alignment (“good”, line 7), P recruits statistics again and proffers an additional assessment which, however, is formulated into a less specialistic register if compared to percentiles curves (“as for the growth is a growth on average”, line 8). In this way, P i) reassures M by treating her son’s growth as non-problematic and typical, and ii) contributes to constructing statistics as the reliable definition of “normality” by considering the infant’s alignment to the statistical norm a reassuring argument. Note that, as in the examples above, the excerpt ends with M’s and G’s upgraded positive assessments (“very good”, line 9; “good good”, line 10). In so doing, they align with P’s no-problem assessment and display that a mutual understanding has been reached.

The next section illustrates a deviant case: despite the pediatrician engages in the normalizing practice, the mother resists the statistically accounted no-problem assessment thereby treating statistical normality as not reliable and satisfactory enough.

6.1When statistics is not enough: Resisting the pediatrician’s normalizing practice

The following example shows how a mother resists the

pediatrician's no- problem assessment by mobilizing her first-hand knowledge: she compares the growth of her own two daughters.

Ex. 7 - VA_09 (7.58 – 8.28)

M: mother P: pediatrician

We join the conversation immediately after P has entered the baby's numerical values for height, weight, and head circumference into the electronic health record. While M is dressing her daughter on the couch, P is sitting at the desk and looking at the computer.

1 P allora è cresciuta un etto (.) e un centimetro
so she has grown a hectogram (.) and a centimeter

2 P però a quest'età [vedersi a distanza di un me:se
though at this age [seeing each other after one mo:nth
((looking at M))

3 M [un etto::
[a hectogra::m ((looking at P with a sad expression))

4 P ma non è mica una bimba patita è,
but she isn't an underweight child,

5 M no.

6 P cioè è al settantacinquesimo percentile
I mean she is at the seventy-fifth percentile

7 P non so cosa voglia di più dalla vita,
I don't know what more you want from life,

8 M no no niente,
no no nothing,

9 M [però] l'altra cresceva di più.
[though] the other one grew more.

10 P [eh.]

11 (1.0)

12 P ma io non son così convinta.
well I'm not that sure.

13 M va bene (.) ^allora stai [tranquilla
ok. (.) ^so don't [worry
^((speaking to the baby))

14 P se vuole andiamo a vedere.
if you want we can check.

At the beginning of the excerpt, P assesses the baby's growth by comparing the values just measured in the physical examination with the last ones registered in the electronic health record ("so she grew a hectogram and a centimeter", line 1). Immediately after that, she provides an explanation for the (projected as) slight improvement in the growth ("though at this age seeing each other after one month", line 2). Indeed, the adversative "though" ("però", in Italian) in turn initial position pronounced with a

particular emphasis conveys a sense of a counter-expected situation that needs to be accounted for. However, even before P reaches a possible turn completion point, M intervenes by repeating the infant's weight increase rate ("a hectogram", line 3) and looking at P with a sad expression. In this way, M further problematizes the baby's growth value (see ex. 3), treats P's pre-account in line 2 as unsatisfactory, and guides P to provide an additional explanation. At this point, P accounts for her no-problem stance and explicitly contrasts M's turn (see the "but" preface, line 4) by stating that the baby is not an underweight child ("but she isn't an underweight child", line 4). P thus frames the infant's growth as non- problematic by citing the individual and visible characteristics of the idiosyncratic child as evidence (see Maynard 2004). However, despite M's agreement in line 5, P expands her last assessment and formulates it into statistical terms by locating the child's growth into the percentile curve of reference ("I mean she is at the seventy-fifth percentile", line 6). Then, through the use of a rhetorical question and extreme case formulation, she frames M's concern as groundless and therefore misplaced ("I don't know what more you want from life", line 7). In doing so, P markedly constructs the baby's growth as non-problematic and treats statistics as the ultimate definition of typical and normal growth.

However, immediately after that, M first answers P's rhetorical question ("no no nothing", line 8) and then strongly resists P's stance (see the adversative "though" in turn initial position, line 9). Indeed, she compares the infant's growth with the growth of the oldest daughter, thus treating P's recruitment of statistics as non-satisfactory ("though the other one grew more", line 9). In this way, M carries on her problematic trajectory by mobilizing the "voice of experience" (Mishler 1984) and resorting to her first-hand knowledge, i.e., she compares the growth of her daughters. This strong move constrains P to take into consideration the comparison just evoked by M and further account for her no-problem trajectory. At this point, after a short gap (line 11), P explicitly disagrees with M's claim ("well I'm not that sure", line 12) and soon afterward proposes to check the information ("if you want we can check", line 14, note the use of the inclusive pronoun "we").

Despite P's clear attempt to de-trigger M's worry (see, for instance, lines 4 and 7), this is the only case in the corpus where P's recruitment of expert knowledge (i.e., growth percentiles) to assess the infant's growth is resisted and treated as unsatisfactory and unreliable by a parent.

7. Discussion

The analysis investigated how the pediatricians in the corpus pursue a no- problem assessment of the infants' physical growth during the diagnostic-like phase of well-child visits by engaging in a *normalizing practice.* It consists of the pediatrician's formulation of the numerical values for length, weight, and head circumference in terms of statistical normality which is "talked into being" (Heritage 1984: 290) by referring to the relevant growth percentile, and the subsequent translation of the statistically formatted assessment into lay language.

As for the sequential position, the display of concern on the parents' side seems to provide an interactional environment that makes the pediatrician's normalizing practice sequentially relevant, yet without determining its occurrence (see ex. 2 and 3). In other words, the normalizing practice constitutes one possible way among others for the pediatrician to pursue a no-problem, and by extension reassuring, assessment trajectory.

The pediatrician's normalizing practice is accomplished through different means at the turn design level. First, the lexical choice: the infants' growth is always assessed in reference to percentile curves, e.g., "as for the curve we're always at the fiftieth for weight and at the seventy-fifth for height (ex. 1, lines 1 and 3);

"she is at the fiftieth for weight and at the seventy-fifth for length" (ex. 4, lines 6 and 8), "perfectly at the fiftieth percentile" (ex. 5, line 4), "everything is at the fiftieth percentile for him too" (ex. 6, line 4), "I mean she is at the seventy-fifth percentile" (ex. 7, line 6). In this way, the pediatricians position the infant's growth values in relation to a standard range and according to what is considered the "ideal", i.e., statistically normal, growth curve. As the analysis has shown, the statistically formatted assessment is subsequently translated into everyday terms, e.g., "so absolutely regular eh" (ex 1, line 4); "therefore she is exactly regular", (ex. 4, line 9); "the weight is appropriate for the height, it is not exceeding so it is ok" (ex. 5, lines 9, 11, 12); "so exact, precise" (ex. 5, line 21); "so he didn't lose anything in weight" (ex. 6, line 6). In doing so, the pediatricians not only provide parents with a more accessible and comprehensible assessment but also disambiguate the meaning of the previously provided statistical norm.

Second, the normalizing practice is accomplished through the use of declaratives, that, given the K+ (i.e., more knowledgeable, see Heritage 2012a,b) epistemic status of the pediatrician during the activity at stake, confer to the propositional content of the assessment the status of unquestionable claims (Enfield and Sidnell 2015; Heritage 2012a,b). In addition, the frequent use of

extreme case formulations (see ex. 4, lines 6 and 9; ex. 5, lines 3, 5, 18, 20; ex. 6, line 4, 7) as well as the prosodic features, further contribute to ratify the pediatrician's no-problem trajectory (on the design of "good news" delivery see Freese and Maynard 1998; Maynard and Frankel 2006). By designing their assessment through straightforward statements, the pediatricians appear to avoid delivering "diagnostic" information with uncertainty, which on the contrary, has been found to be rather common in medical settings (on "epistemic cautiousness" in institutional interactions, see Caronia and Dalledonne Vandini 2019; Heritage 2004; Zuczkowski et al. 2014). In this way, pediatricians affirm their epistemic authority and rights (Heritage 2012a,b) to ultimately assess the infants' growth, thus staging and reconfirming their institutionally relevant identity.

The analysis has illustrated that the pediatrician makes "two things with words" through this practice: a. reassuring parents about their infant's growth, and b. ratifying medical/statistical knowledge as the authoritative voice. Indeed, when implementing the normalizing practice, the pediatricians explicitly construct the idiosyncratic infant's growth as typical -and therefore unproblematic- in relation to a statistically established standard, and this is treated by both parties as the suitable outcome of the assessment. This not only helps parents gain a better

understanding of their infants' specific condition but also, most importantly, mitigates their worries by providing reassurance and support. However, there is much more than this. By mobilizing a specific kind of biomedical expert knowledge (i.e., statistically-based growth assessment), pediatricians patrol their domain of expertise and institutional role. At the same time, they provide parents with the evidential ground (i.e., growth percentiles) upon which their "diagnostic" conclusions are drawn. In other words, the pediatricians' recruitment of medical expertise serves to account for and validate their no-problem assessment. As Peräkylä (2006) argues, "intertwined with the "authoritarian" elements, there are also features of interaction […] that maintain the doctor's accountability for the evidential basis of the diagnosis, and thereby preserve a degree of mutual intelligibility of the diagnostic process" (p. 216). Given parents' alignment with the pediatrician's normalization (see ex. 1, lines 2 and 5; ex. 4, line 10; ex. 5, lines 8, 10, 13; ex. 6, lines 4 and 6), it is possible to argue that this practice seems effective in both reassuring parents and ratifying medical knowledge as the most authoritative voice. Indeed, in this corpus, there is only one case where a parent resists the statistically accounted no- problem assessment (see ex. 7). This deviant case demonstrates that parents (and pediatricians) overall privilege pediatric expert knowledge as the ultimate and legitimate basis for

their child's growth assessment.

8. Concluding remarks

As this chapter has illustrated, when the assessment of the infants' growth is at stake, pediatricians and parents concurrently presuppose and make interactionally relevant a statistical definition of "normality" as the culturally accepted benchmark. Indeed, they engage in constructing a shared understanding of what an unproblematic infant growth is by cooperatively constituting statistics as the ultimate trustworthy representation of "normality". The normalizing practice thus seems crucial in locally establishing a common ground between the pediatricians and the parents despite the epistemic asymmetry at stake: by translating growth evaluations from expert into everyday terms, pediatricians both display their "professional vision" (Goodwin 1994) and contribute to making medical knowledge more accessible and comprehensible to parents. This is particularly relevant from an applied point of view: by translating expert knowledge into a more accessible register, pediatricians broaden parents' opportunities to actively participate in the interaction and promote a proper comprehension of growth curves and

percentiles. Indeed, it is reasonable to assume that the pragmatic and epistemic work of the normalizing practice (i.e., providing reassurance and ratifying the medical knowledge as the most authoritative voice) is effective on an interactional level: at the end of the sequence, parents markedly align with the pediatricians' no-problem trajectory. If parental apprehension and concern about infants' growth are quite common in these kinds of pediatric visits, the pediatricians' (attempt to) balance authority and accountability (Peräkylä 1998, 2006) accomplished through the normalizing practice seems an effective interactional means of taking care of parents' worries and providing emotional assistance.

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