Universitas: Journal of Global Research and Innovation
Excellence. Quality. Reliability. Service | Contributing to the body of Knowledge

Household Health Priorities using Gordon's Functional Health Patterns

Jay Stephen C. Mondong, RN, RM; Jemelyn L. Dapar, RM; Maria Luisa P. Antipolo, RN, MN; Ernie T. Galeza, RN, MN, DevEdD, DPE;
Emerson S. Silo, Jr., RN, RM; Mary Grace S. Cenas, RM
Tangub City Global College
https://doi.org/10.5281/zenodo.22786008

ABSTRACT

Household health assessments often emphasize disease and environmental indicators while giving less attention to the practices, relationships, coping responses, and beliefs that shape family functioning. This descriptive cross-sectional study assessed household health status and priority needs among 300 adult household representatives from seven community zones in a local community in Northern Mindanao, Philippines. A bilingual four-point Household Community Needs Assessment Instrument organized around Gordon's Eleven Functional Health Patterns was administered to one adult representative per household. Frequencies, percentages, weighted means, composite weighted means, and descriptive ranks were used. The overall composite mean was 3.32, interpreted as Healthy. Seven patterns were classified as Healthy and four as Moderately Healthy. Role-relationship obtained the highest mean (3.58). Sexuality-reproductive received the lowest mean (2.86), followed by activity-exercise (3.10), coping-stress tolerance (3.16), and sleep-rest (3.23); these domains were identified as priorities for further assessment and preventive attention. Six community zones were classified as Healthy, while Zone 3 was Moderately Healthy (3.23) and ranked first for localized follow-up. Gordon's framework provided a structured account of multidimensional household functioning and supported descriptive priority setting. Program decisions should combine these aggregate findings with item-level review, confidential community consultation, service information, feasibility, and available resources.

Keywords: *community health assessment, functional health patterns, household functioning, priority setting, Gordon's framework, preventive health, Philippines*

INTRODUCTION

Household health cannot be understood solely by identifying illnesses among family members. Families also differ in how they manage health, maintain nutrition and activity, obtain rest, fulfill roles, respond to stress, address reproductive-health concerns, and apply personal beliefs. These dimensions interact and may reveal household strengths or needs not readily captured in routine disease and demographic records.

Contemporary health literature treats health as a dynamic condition involving physical, psychological, behavioral, social, and environmental functioning. Community health-needs assessments can support the identification of risks and assets, priority setting, resource allocation, and the design of preventive and health-promotive services (Kim et al., 2022; Kobashi, 2025; Pazzaglia et al., 2023; Ravaghi et al., 2023). Gordon's Functional Health Patterns provide a systematic way to organize multidimensional health information into eleven interrelated domains (Gordon, 1994).

Although functional-health frameworks are well established in nursing assessment, community investigations often emphasize disease prevalence, demographic characteristics, and environmental conditions. Household-level application of all eleven patterns remains less common, particularly as a basis for comparing small geographic areas and setting local preventive priorities (Butcher et al., 2024; Hiriscau et al., 2024; Pazzaglia et al., 2023). The study community did not previously have an organized household profile covering all seven local zones through this framework.

This study therefore assessed household health status and identified priority needs among participating families from seven community zones in Northern Mindanao. It described household functioning across Gordon's eleven patterns, summarized overall status within each zone, established descriptive rankings, and identified the lowest-rated domains for further validation and proportionate community attention.

Research Problem

The local community lacked a structured, multidimensional household health profile that simultaneously examined the eleven functional patterns and allowed descriptive comparison across its seven community zones. Without such a profile, preventive planning may overemphasize disease or environmental indicators while overlooking behavioral, psychosocial, relational, reproductive, coping, sleep, and belief-related dimensions of household functioning. The study addressed this gap by determining which functional health patterns and community zones showed comparatively lower reported health status and therefore warranted further assessment and proportionate preventive attention.

Assumptions of the Study

The study assumed that eligible adult household representatives could provide sufficiently informed reports about routine household practices and conditions; that the bilingual

instrument was understandable to respondents following its review and pilot procedures; and that the four-point scoring system could summarize reported functioning consistently across the eleven patterns. It further assumed that lower aggregate means could serve as descriptive signals for follow-up priority setting. These assumptions do not imply that the ratings constitute clinical diagnoses, causal evidence, or proof that all households within a zone share the same conditions.

Objectives of the Study

The overall objective was to determine the reported household health status and priority needs of participating families using Gordon's Eleven Functional Health Patterns. Specifically, the study sought to: (1) determine household health status across the eleven functional health patterns; (2) describe the overall household health status of each of seven community zones; (3) rank the functional health patterns according to weighted mean scores; (4) rank the community zones according to composite weighted mean scores; and (5) identify the lowest-rated functional health patterns as priorities for further household and community assessment.

Conceptual or Theoretical Framework

The study was anchored in Gordon's Eleven Functional Health Patterns, which conceptualize health as multidimensional and reflect interrelated biological, psychological, behavioral, and social functioning (Gordon, 1994; Hiriscau et al., 2024). The framework comprises health perception-health management, nutritional-metabolic, elimination, activity-exercise, sleep-rest, cognitive-perceptual, self-perception-self-concept, role-relationship, sexuality-reproductive, coping-stress tolerance, and value-belief patterns.

Each pattern represented a distinct but connected aspect of household functioning. Item scores were combined into domain means, and the eleven pattern means were summarized into an overall value for each community zone. Higher scores denoted more favorable reported functioning. The framework was used for descriptive organization and priority setting; it was not tested as a causal model and the results do not constitute clinical diagnoses.

METHODOLOGY

Research Design

A descriptive quantitative cross-sectional design was used because the study sought to summarize reported household practices, conditions, relationships, and experiences during one assessment period without manipulating variables or testing causal relationships.

Research Locale or Study Setting

Data were collected at the household level in seven community zones of a local community in Northern Mindanao, Philippines. The seven-zone structure provided the geographic basis

for proportionate sampling and descriptive comparison of composite household health status.

Participants or Data Sources

The respondents were 300 adult household representatives, with one qualified representative providing information for each participating household. Eligible respondents were at least 18 years old, resided in the household, were knowledgeable about family conditions, and consented to participate. The source report described proportionate stratified sampling across the seven community zones. The achieved distribution was 52 households from Zone 1, 41 from Zone 2, 41 from Zone 3, 50 from Zone 4, 56 from Zone 5, 38 from Zone 6, and 22 from Zone 7.

Research Instruments or Materials

The study used a bilingual Household Community Needs Assessment Instrument based on Gordon's Eleven Functional Health Patterns. Statements were answered as Always, Often, Seldom, or Never. Positively phrased items were scored from 4 to 1, while negatively phrased items were reverse-scored so that higher scores consistently represented healthier reported functioning. Before field use, knowledgeable reviewers examined the instrument for relevance, clarity, representativeness, and equivalence between the English and Cebuano versions. The questionnaire was pilot-tested, and an internal-consistency assessment was conducted; feedback was incorporated into the instrument and administration procedures. The source manuscript did not report the numerical validity and reliability coefficients, so none are introduced here.

Data Gathering Procedure

Institutional and local permissions were secured before data collection. Data collectors were oriented on household selection, standardized administration, informed consent, privacy, neutral interviewing, and completeness checking. After written consent, one eligible adult representative per household completed the bilingual instrument with neutral assistance when needed. Questionnaires were checked, coded, and encoded for analysis.

Data Analysis

Frequencies and percentages summarized response distributions. The weighted mean was calculated as the sum of the products of response frequency and assigned score divided by the number of valid responses. Item means were summarized within each functional pattern, and the eleven pattern means were averaged to obtain a composite mean for each community zone. Means of 3.26-4.00 were interpreted as Healthy, 2.51-3.25 as Moderately Healthy, 1.76-2.50 as Unhealthy, and 1.00-1.75 as Critically Unhealthy. Patterns and zones were ranked from the lowest mean, representing the highest descriptive priority, to the highest mean. Equal means received the same rank. Rankings were descriptive and were not treated as evidence of statistically significant differences. No inferential analysis or statistical software was reported in the source manuscript.

Ethical Considerations

Institutional and local authorization and written informed consent were obtained. Respondents were informed of the study purpose, procedures, voluntary nature, confidentiality safeguards, and right to decline or withdraw without penalty. Privacy was maintained during administration, questionnaires were coded rather than named, access to records was restricted, and results were reported in aggregate in accordance with applicable data-privacy requirements.

RESULTS AND DISCUSSION

Objective 1: Household Health Status Across Functional Patterns

Functional health pattern	Weighted mean	Interpretation
Health perception-health management	3.43	Healthy
Nutritional-metabolic	3.47	Healthy
Elimination	3.51	Healthy
Activity-exercise	3.10	Moderately Healthy
Sleep-rest	3.23	Moderately Healthy
Cognitive-perceptual	3.46	Healthy
Self-perception-self-concept	3.36	Healthy
Role-relationship	3.58	Healthy
Sexuality-reproductive	2.86	Moderately Healthy
Coping-stress tolerance	3.16	Moderately Healthy
Value-belief	3.36	Healthy
Overall composite weighted mean	3.32	Healthy

Table No. 1. Household Health Status According to Gordon's Functional Health Patterns

The overall composite weighted mean was 3.32, interpreted as Healthy. Seven patterns were classified as Healthy and four as Moderately Healthy; none fell within the Unhealthy or Critically Unhealthy ranges. Role-relationship obtained the highest mean (3.58). The four Moderately Healthy patterns were sexuality-reproductive (2.86), activity-exercise (3.10), coping-stress tolerance (3.16), and sleep-rest (3.23). The overall Healthy classification reflects generally favorable reported functioning, but the domain-level pattern remains important because a composite mean can conceal comparatively weaker areas (Gordon, 1994; Pazzaglia et al., 2023).

Objective 2: Household Health Status by Community Zone

Zone	Households	Composite weighted mean	Interpretation
Zone 1	52	3.38	Healthy
Zone 2	41	3.35	Healthy

Zone	Households	Composite weighted mean	Interpretation
Zone 3	41	3.23	Moderately Healthy
Zone 4	50	3.36	Healthy
Zone 5	56	3.31	Healthy
Zone 6	38	3.28	Healthy
Zone 7	22	3.32	Healthy
Overall	300	3.32	Healthy

Table No. 2. Overall Household Health Status by Community Zone

Six zones were classified as Healthy. Zone 3 had the lowest mean (3.23) and was the only zone classified as Moderately Healthy, while Zone 1 had the highest composite mean (3.38). The 0.15-point range between the highest and lowest zone means supports cautious interpretation. Zone 3 provides a logical starting point for localized verification, but the aggregate means do not establish statistically significant differences or imply uniform conditions within each zone. Community-needs assessment literature supports combining quantitative profiles with local assets, service information, and resident participation when priorities are finalized (Kim et al., 2022; Ravaghi et al., 2023).

Objectives 3 and 5: Priority Ranking of Functional Patterns and Priority Domains

Priority rank	Functional health pattern	Weighted mean	Interpretation
1	Sexuality-reproductive	2.86	Moderately Healthy
2	Activity-exercise	3.10	Moderately Healthy
3	Coping-stress tolerance	3.16	Moderately Healthy
4	Sleep-rest	3.23	Moderately Healthy
5	Self-perception-self-concept	3.36	Healthy
5	Value-belief	3.36	Healthy
7	Health perception-health management	3.43	Healthy
8	Cognitive-perceptual	3.46	Healthy
9	Nutritional-metabolic	3.47	Healthy
10	Elimination	3.51	Healthy
11	Role-relationship	3.58	Healthy

Table No. 3. Priority Ranking of Gordon's Eleven Functional Health Patterns

Sexuality-reproductive ranked first in priority, followed by activity-exercise, coping-stress tolerance, and sleep-rest. These were the four domains classified as Moderately Healthy. Sexuality-reproductive therefore warrants confidential and culturally appropriate follow-up concerning reproductive-health information, communication, practices, service access, and referral needs. Activity, coping, and sleep form a second cluster involving everyday routines and psychosocial functioning. Gordon's framework retains these interconnections,

although the descriptive design cannot establish causal pathways among them (Gordon, 1994; Hiriscau et al., 2024).

Objective 4: Priority Ranking of Community Zones

Priority rank	Zone	Households	Composite weighted mean	Interpretation
1	Zone 3	41	3.23	Moderately Healthy
2	Zone 6	38	3.28	Healthy
3	Zone 5	56	3.31	Healthy
4	Zone 7	22	3.32	Healthy
5	Zone 2	41	3.35	Healthy
6	Zone 4	50	3.36	Healthy
7	Zone 1	52	3.38	Healthy

Table No. 4. Priority Ranking of Community Zones According to Overall Household Health Status

Zone 3 ranked first for descriptive priority, followed by Zones 6, 5, 7, 2, 4, and 1. These rankings can guide sequencing of follow-up assessment and resource planning, but they should not be treated as categorical judgments about communities. Household-level diversity within every zone should be respected.

General Discussion

Across the objectives, the findings describe a generally Healthy household profile with identifiable relative priorities. Role-relationship emerged as the strongest reported domain and may represent an existing family and social resource. In contrast, sexuality-reproductive, activity-exercise, coping-stress tolerance, and sleep-rest warrant further verification and proportionate preventive attention. The results demonstrate the value of retaining domain-level information rather than relying only on an overall composite score.

Program planning should begin with item-level review and confidential community consultation. For sexuality-reproductive health, possible follow-up may include accurate reproductive-health information, voluntary family-planning counseling, age-appropriate education, referral pathways, and service information if supported by item-level findings. Activity-exercise planning should first examine barriers involving safety, time, mobility, facilities, age, and health condition. Coping-stress tolerance and sleep-rest may be explored through practical health education, family-support activities, help-seeking information, healthy sleep guidance, and referral when indicated. These are conditional implications rather than interventions established by the aggregate means alone.

Future assessment cycles should document the sampling frame, allocation procedure, collection period, instrument-review process, pilot sample, and numerical validation and reliability results. Item-level totals and scoring direction should be checked during collection and encoding, and repeated assessments should use consistent administration, interpretation ranges, and an audit trail. Qualitative interviews or focused discussions may

explain domain scores, while measures of variability and inferential analyses may be added when formal group comparisons are intended.

Limitations

The study reflects self-reported information from one adult representative in each of 300 participating households within a single community. Findings are most applicable to local planning and should not be generalized automatically to other settings. The cross-sectional design does not establish causation, and aggregate means do not identify clinical conditions or the specific item responses responsible for each domain score. The present article relies on the reported aggregate tables; item-level records were not available for independent reanalysis. These boundaries support cautious, proportionate use of the findings while preserving their value as a structured local health profile.

CONCLUSION

Participating households generally reported a Healthy level of multidimensional functioning, with role-relationship as the strongest relative pattern. Sexuality-reproductive, activity-exercise, coping-stress tolerance, and sleep-rest were classified as Moderately Healthy and constitute the principal priorities for verification and preventive attention. Zone 3 had the lowest composite mean and was the only area classified as Moderately Healthy, making it the first geographic priority for localized follow-up. Gordon's Functional Health Patterns provided a coherent framework for organizing household information and setting descriptive priorities. Specific programs should be based on item-level review, confidential community consultation, service evidence, feasibility, and available resources rather than domain means alone.

DECLARATIONS

Ethics approval and consent to participate. Institutional and local authorization was obtained, written informed consent was secured, participation was voluntary, confidentiality was maintained, and findings were reported in aggregate.

Consent for publication. Not applicable because no individually identifiable information is presented.

Data availability. The de-identified dataset may be made available by the corresponding author upon reasonable request, subject to institutional authorization and applicable privacy requirements.

Competing interests. The authors declare no competing interests.

Funding. No external funding was reported for the study.

REFERENCES

Butcher, R. C. G. S., Guandalini, L. S., Barros, A. L. B. L., Damiani, B. B., & Jones, D. A. (2024). Psychometric evaluation of the Functional Health Pattern Assessment Screening Tool-Modified Brazilian version. *Revista Latino-Americana de Enfermagem, 32*, e4119. https://doi.org/10.1590/1518-8345.6755.4119

Gordon, M. (1994). *Nursing diagnosis: Process and application* (3rd ed.). Mosby.

Hiriscau, E. I., Cauli, O., Donca, V., Marinescu, L.-A., Macarie, A.-E., Avram, L., Cancel, O.-G., Donca, S., Buzdugan, E.-C., Crisan, D.-A., & Bodolea, C. (2024). The association between functional health patterns and frailty in hospitalized geriatric patients. *Geriatrics, 9*(2), Article 41. https://doi.org/10.3390/geriatrics9020041

Kim, T. Y., Baldrias, L., Papageorgiou, S., Aguilar, E., Tee, M., Kelly, T., Hill, J., & Wilkes, M. (2022). A community-based survey to assess risk for One Health challenges in rural Philippines using a mobile application. *One Health Outlook, 4*, Article 7. https://doi.org/10.1186/s42522-022-00063-0

Kobashi, Y. (2025). Health needs assessment tool for identifying health issues among community residents with unmet needs. *Tropical Medicine and Health, 53*, Article 29. https://doi.org/10.1186/s41182-025-00713-9

Pazzaglia, C., Camedda, C., Ugenti, N. V., Trentin, A., Scalorbi, S., & Longobucco, Y. (2023). Community health assessment tools adoptable in nursing practice: A scoping review. *International Journal of Environmental Research and Public Health, 20*(3), 1667. https://doi.org/10.3390/ijerph20031667

Qadir, J., Maddah, D., Qoronfleh, M. W., & Senturk, R. (2025). Toward multiplex health: Integrating complexity, normativity, and open science. *Frontiers in Psychology, 16*, 1603474. https://doi.org/10.3389/fpsyg.2025.1603474

Ravaghi, H., Guisset, A.-L., Elfeky, S., Nasir, N., Khani, S., Ahmadnezhad, E., & Abdi, Z. (2023). A scoping review of community health needs and assets assessment: Concepts, rationale, tools and uses. *BMC Health Services Research, 23*, Article 44. https://doi.org/10.1186/s12913-022-08983-3

Republic Act No. 10173. (2012). Data Privacy Act of 2012. Official Gazette of the Republic of the Philippines. https://www.officialgazette.gov.ph/2012/08/15/republic-act-no-10173/